

May 22–25, 2023

Sacramento, CA

APHL[®]2023

where laboratory science and public health meet



Final Program



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#APHL

www.aphl.org/AC

Agenda at a Glance

Events denoted with purple below are not livestreamed to the virtual platform. Preconference workshops, Innovate! sessions and roundtables are only available to in-person attendees. Only the plenary and concurrent sessions will be livestreamed.

	Monday, May 22				Tuesday, May 23		
6:30 am							
7:00 am				Registration Open	Innovate! Sessions		
7:30 am							
8:00 am	Preconference Workshops <i>in person only with separate registration fee</i>				Break		
8:30 am							
9:00 am					Newborn Screening and Genetic Privacy		
9:30 am							
10:00 am					Rapid Poster Presentations		
10:30 am					Break		
11:00 am							
11:30 am							
12:00 pm	Lunch <i>on your own</i>	Lab Directors Lunch <i>invite only</i>		Lunch provided in the Exhibit Hall		Exhibit Hall and Posters	
12:30 pm							
1:00 pm							
1:30 pm	Welcome to Sacramento			Concurrent Sessions			
2:00 pm	Reducing Health Inequity and Ensuring Justice			Break			
2:30 pm				Concurrent Sessions			
3:00 pm	Rapid Poster Presentations		Exhibit Hall and Posters	Break			
3:30 pm	Break			Concurrent Sessions			
4:00 pm	Wildfires, Droughts, and Floods, Oh My!			Break			
4:30 pm				Concurrent Sessions			
5:00 pm	Welcome Reception			Networking Reception			
5:30 pm							
6:00 pm							

All Times Are Pacific Daylight Time

	Wednesday, May 24		Thursday, May 25	
7:00 am				
7:30 am	Roundtable Sessions		Roundtable Sessions	
8:00 am				
8:30 am	Break		Break	
9:00 am			To Sequence or Not to Sequence	
9:30 am	Awards Ceremony and Breakfast			
10:00 am			Break	
10:30 am	Break		How to Attract and Keep Superstar Laboratory Talent	
11:00 am	Concurrent Sessions			
11:30 am			APHL 2023 Adjourns	
12:00 pm				
12:30 pm	Lunch provided in the Exhibit Hall			
1:00 pm				
1:30 pm	Member Assembly			
2:00 pm				
2:30 pm	Break			
3:00 pm				
3:30 pm	Concurrent Sessions			
4:00 pm				
4:30 pm	Break			
5:00 pm	Dr. Katherine Kelly Session ZDoggMD			
5:30 pm				
6:00 pm				

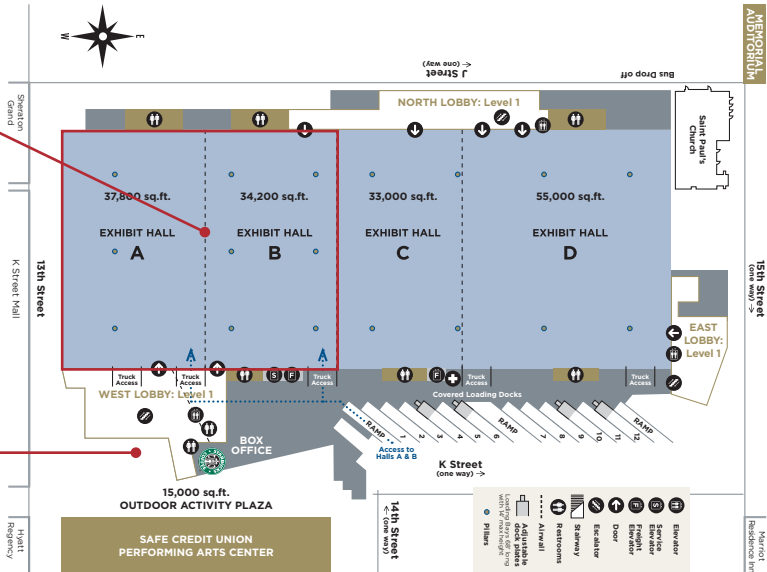
Convention Center Floor Plans

Lower Level

Exhibit Hall AB

- Exhibit booths
- Poster presentations
- Box lunches, breaks, receptions

West Lobby Entrance



Upper Level

Rooms A2-A11

- Concurrent sessions
- Roundtables
- Innovate! sessions
- Preconference workshops

Ballroom A1

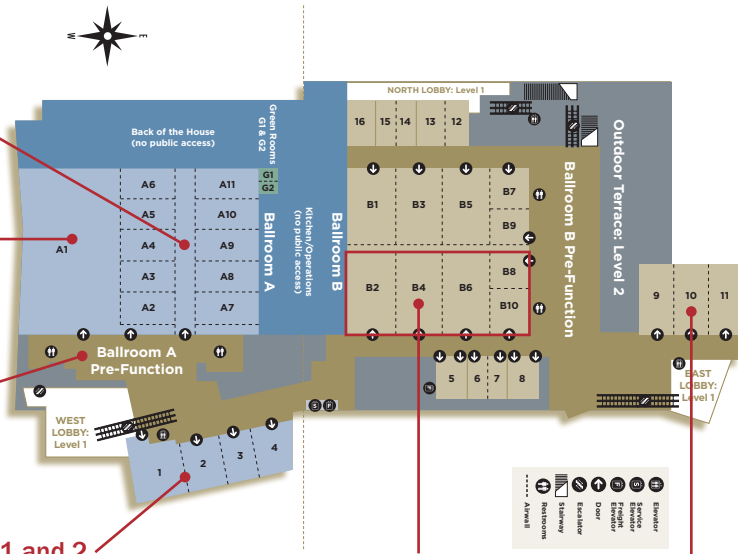
- Plenary sessions
- Concurrent sessions
- Member Assembly

Ballroom A Prefunction
Conference registration

Rooms 1 and 2
Roundtables

Ballroom B2/4/6/8/10
Awards breakfast

Rooms 9-11
Fellows sessions



Welcome to the 2023 Annual Conference of the Association of Public Health Laboratories in beautiful Sacramento, California!

We are excited to again offer a hybrid conference that provides exceptional in-person opportunities as well as captivating virtual experiences for our members across the country. Thanks to the amazing number of high-quality proposals you submitted, your planning committee has put together an exciting program for this year's conference!

Prior to the conference, workshops will be offered on laboratory design, how to create an inclusive laboratory culture and diagnosing the cultural climate in your laboratory. Laboratory Leaders of Today will also participate in a preconference workshop on strategic planning. Our conference will kick off with plenary sessions on health equity and climate change followed throughout the week by other hot topics in newborn screening, next-generation sequencing and workforce retention. Our conference will also offer numerous concurrent sessions, roundtable discussions and posters, all of which will span many disciplines in public health laboratory science. We are very excited to share that this year's Katherine Kelley Session will be provided by Dr. Zubin Damania (aka ZDoggMD)! ZDoggMD is a physician, musician and comedian who has garnered over a billion views across Facebook, Instagram and YouTube.

We are proud that our meeting in Sacramento will host the largest contingent of APHL-CDC Public Health Laboratory Fellows that has ever attended an APHL Annual Conference! Over 140 fellows from APHL, CDC and other organizations will converge on Sacramento to share in the networking and education that our conference guarantees to provide. This year's conference will also include a dedicated Fellows Track that will offer career development and professional promotion opportunities alongside our fantastic meeting content to allow for engagement and networking with all the fellows.

As always, our Exhibit and Poster Hall will be a hub of activity so please take time each day to visit our exhibitors, corporate partners and poster presenters, all of whom will be highlighting their latest and greatest products, services and science. We will again offer several Innovate Sessions featuring educational presentations with live Q&A providing a unique opportunity to engage with our industry partners. We will also have our exhibitor raffle, so be sure to visit them all!

On behalf of the APHL Program Planning Committee and Board of Directors, we welcome you to Sacramento! We hope that you have an engaging experience and that you explore the great sessions and interactive experiences that the annual conference has to offer.

Tim Southern, PhD, D(ABMM)
APHL 2023 Planning Committee Chair and APHL President-Elect

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.

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Megan Crumpler, PhD, HCLD(ABB), Orange County, CA, Local Institutional Member

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APHL 2023 Planning Committee

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Katya Ledin, PhD, MPH, HCLD(ABB), California Public Health Laboratory

Marc Rumpler, MS, PhD, DABCC, FAACC, NRCC, DLM (ASCP)SC^{CM}, Tennessee Department of Health: Laboratory Services

Deborah Severson, Fairfax County (VA) Public Health Laboratory

Scott Shone, PhD, HCLD(ABB), North Carolina State Laboratory of Public Health

Joey Stringer, Dallas County (TX) Public Health Laboratory

Anthony Tran, DrPH, MPH, D(ABMM), California Public Health Laboratory

Shane Wyatt, Virginia Division of Consolidated Laboratory Services

General Information

Registration Desk Hours

Ballroom A Pre-function

Sunday, May 21	3:00 pm – 7:00 pm
Monday, May 22	7:00 am – 6:00 pm
Tuesday, May 23	6:30 am – 6:00 pm
Wednesday, May 24	7:00 am – 5:30 pm
Thursday, May 25	7:00 am – 12:00 pm

COVID-19 Protocols

All in-person APHL 2023 attendees are strongly encouraged to be fully vaccinated and boosted against COVID and to wear well-fitting, high-quality masks (e.g., KF94, KN95 or better) if desired.

Complimentary Wireless Internet

There is complimentary wireless internet in the public areas of the convention center.

Network: **APHL2023**
Password: **SMARTLAB**

Meeting Location and Headquarters Hotel

Conference sessions and events:
SAFE Credit Union Convention Center

Headquarters hotel:
Hyatt Regency Sacramento

Secondary hotel:
Sheraton Grand Sacramento

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.

Please Download the Mobile App

You'll need the app in order to retrieve your attendee badge onsite!

Search for and download the APHL Conferences App in your app store. Within the app, select the APHL 2023 conference. You'll be prompted to log in; the **username** is the email address you registered with, and the **password** is your unique access key that was emailed prior to the conference.

The app is also quite handy and will enhance your experience!

- Conveniently access and search details on sessions, posters, exhibitors and more.
- Navigate the conference center and exhibit hall.
- Personalize your experience by tagging sessions, exhibitors, posters and speakers.
- Create and export notes about sessions.
- Connect with users (attendees).
- Receive alerts, reminders and changes in real time.



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 39 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 39 contact hours by attending in person, or viewing online, all available sessions, both live and recorded.

Tour the California State Public Health Laboratory

Thursday, May 25, 12:30 pm – 5:00 pm

The bus will leave the convention center West Lobby promptly at 12:30 pm and return by 5:00 pm. The lab is about 90 minutes from Sacramento. A boxed lunch will be provided. Be sure to stop by the registration desk to confirm that you are scheduled for this tour. Be sure to meet in front of the West Lobby at 12:15 pm.

Tribal Support

The APHL 2023 Annual Conference is taking place in Sacramento, CA, which occupies the ancestral homelands of the Nevada City Rancheria Nisenan tribe and the California Valley Miwok tribe. APHL expresses its support to these tribes in their struggle for federal recognition and restoration of their ancestral homelands.

New! Public Health Laboratory Fellows Participation

We are excited to welcome more than 140 Public Health Laboratory Fellows to APHL 2023. These early career scientists, currently placed within public health laboratories across the country, will participate in person in Sacramento. These first-time attendees will attend sessions dedicated to the Public Health Laboratory Fellowship Program and will also join other attendees and exhibitors in participating in Annual Conference activities.



Thank You to Our Generous Sponsors!



Welcome Reception
Mobile App

Awards Breakfast

Morning Coffee Break (Wednesday)
Afternoon Break (Tuesday)



Networking Reception

Tote Bags
General Conference Support



Morning Coffee Break (Tuesday)

Morning Coffee Break (Thursday)

Dr. Katherine Kelley Distinguished Session Sponsors



Exhibit Hall Raffle — visit with exhibitors, win prizes!

Follow the instructions on your exhibit raffle card, found in your conference tote bag. Turn in the completed card at the registration desk **no later** than 2:30 pm on Wednesday, May 24. Join us at the live raffle drawing in the exhibit hall, starting at 3:00 pm on Wednesday. *You must be present to win.* Prizes for the raffle include:

- Two coach airline tickets on Delta Airlines to anywhere in the continental US
- Complimentary registration to APHL 2024 in Milwaukee, WI
- \$150 Amazon.com gift card (compliments of an anonymous donor)
- One coach airline ticket on Delta Airlines to anywhere in the continental US
- \$100 Amazon.com gift cards (compliments of Clear Labs)
- Cukoo rice cooker (compliments of HDR)
- Mystery bag of Colorado and National Jewish Health swag (compliments of National Jewish Health)
- \$100 Amazon.com gift card (compliments of Thermo Fisher Scientific)
- \$100 gift card (compliments of HOK)
- \$100 gift card (compliments of Flad Architects)
- Pipetboy acu 2 (compliments of INTEGRA Biosciences)
- “Control of Communicable Diseases Manual Trilogy” ebook or print (compliments of APHA)
- \$150 Amazon gift card (compliments of Ruvos)
- \$100 LLBean gift card (compliments of Puritan Medical Products)
- Bose SoundLink Flex Portable Bluetooth Speaker (compliments of OpenELIS Foundation)
- \$100 Amazon gift card (compliments of STAT Courier)
- InductiveHealth Engraved Tech (compliments of InductiveHealth Informatics)
- Pair of Third Generation Apple AirPods (compliments of Bruker Scientific)
- Computer backpack and swag (compliments of SCiEX)
- \$100 Amazon gift card (compliments of InBios International)

Exhibitor Scavenger Hunt *for Virtual Attendees*

Connect with exhibitors in the virtual exhibit hall and complete as many scavenger hunt questions as possible! Answer each participating exhibitor’s question about their company, product or service. Correct answers will receive 50 points each, and the attendees with the most points will win a prize! The winners will be announced on May 24 at 5:00 pm PDT. Prizes for the scavenger hunt include:

- One coach airline ticket on Delta Airlines to anywhere in the continental US
- \$100 Amazon.com gift card (compliments of Clear Labs)
- Pipetboy acu 2 (compliments of INTEGRA Biosciences)
- Complimentary registration to APHL 2024 in Milwaukee, WI
- InductiveHealth Engraved Tech (compliments of InductiveHealth Informatics)
- \$100 Amazon gift card (compliments of InBios International)

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.

Visit Us at the APHL Experience Booth!

Discover new resources, share your stories and grab takeaways

▶ **Public Health Laboratory Fellowship Program participants and mentors: share your stories and feedback!**

Visit the storytelling booth to tell your fellowship or mentorship story for APHL's social media and storytelling channels, or you can provide your feedback privately to help continually improve the program. Whether for an Instagram reel or in a confidential conversation, share your story and help shape the future of the program.

▶ **APHL Tools and Program Demonstrations**

Monday, May 22

3:00–4:00 pm (afternoon break)

Knowledge Management Resources for Public Health Laboratories (QSA)

APHL Global Health Program and Twinning (GH)

5:00–6:30 pm (welcome reception)

NGS InSight Demonstration (INF)

Job Seeker Strategies and Resume Development (HR)



Tuesday May 23

10:00–11:00 am (morning break)

Launching the Public Health Career Ambassador Initiative (WF)

Employee Advocacy Workbook (WF)

12:00–1:30 pm (lunch)

New Quality-Related Tools for PHLs and the Laboratory System Improvement Program (QSA)

Utilizing Dashboards to Facilitate Informed Decision-Making (QSA)

2:00–3:00 pm (afternoon break)

Infectious Diseases Tools and Resources (ID)

5:30–6:30 pm (reception)

APHL Learning Center (WF)

Informatics Training Resources and Opportunities (INF)

Wednesday May 24

10:00–11:00 am (morning break)

APHL Career Pathways (WF)

APHL Environmental Health Program (EH)

▶ **APHL giveaways — grab some swag or some of our publications and guides!**



Schedule as of April 26; subject to change

Health and Wellness

Wondering how you will get through a busy week? We've got you covered with some fun ways to be active, be mindful and be healthy on your own or with colleagues at APHL 2023.

Sunrise Walk

Join friends on **Tuesday, May 23, at 6:00 am** for an easy 1-mile walk through the beautiful Capitol Grounds. Weather permitting. Meet in the lobby of the Hyatt Regency Sacramento, 1209 L Street, Sacramento, CA.

Daybreak Dance Session

Start your day with some pep in your step! Catch a beat with APHL's own sock hop sensation Eugene Yeboah on **Wednesday, May 24, at 7:00 am**. Meet in the Ballroom A lobby near the registration desk.

APHL Sock Hop

Let's bust some moves together! Learn a new line dance step or two with guided instruction. Throw caution to the wind, kick off those shoes and get ready to get down! **Tuesday, May 23, and Wednesday, May 24, at 1:00 pm** in Exhibit Hall A, left rear.



Quiet Room

Check in with yourself and practice mindful meditation, breathing exercises or just sit and relax in a quiet space. A no-talking zone will be available Tuesday, May 23, and Wednesday, May 24, from 11:45 am to 1:15 pm in room A11.

Games and Activities

Invite friends to unwind with putt putt golf, cornhole or tic-tac-toe toss. Discover your inner artist while reducing anxiety and stress at the Color Me Calm station. Check out the fun near the APHL Experience booth in the Exhibit Hall and near the APHL 2023 Registration Desk.

Attending the conference virtually or looking for solo activities? We've curated a list of free health and wellness tips and classes on our virtual platform. You'll find everything from meditation and yoga tutorials to workout videos and stress management tips. Check them out on the virtual platform.

Not-to-Miss Events!

Dr. Katherine Kelley Distinguished Session: Dr. Zubin Damania (AKA ZDoggMD)

Wednesday, May 24, 5:00–6:00 pm PDT

Dr. Zubin Damania (AKA ZDoggMD) is a UCSF/Stanford trained physician and founder of Turntable Health, an innovative health care clinic and early model for Health 3.0. During his decade-long hospitalist practice, he began a shadow career under the pseudonym of ZDoggMD. His videos and live shows have since gone epidemically viral, with over a billion views across Facebook, YouTube and Instagram. As host of The ZDoggMD Show, one of the top health and medicine podcasts, Dr. Damania leads a passionate following of over 3 million clinicians and patients toward the vision of Health 3.0.



APHL Annual Awards Ceremony and Breakfast

Wednesday, May 24, 9:00–10:30 am PDT

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

Monday, May 22, 3:00 pm – 6:30 pm PDT

Tuesday, May 23, 10:00 am – 6:30 pm PDT

Wednesday, May 24, 10:00 am – 3:30 pm PDT

Network with industry peers and experts! We have a diverse exhibit hall ready to bring you the latest in technology and equipment solutions. Visit with exhibitors to chat and learn of their products and services. Meet with poster presenters to learn the latest science, trends and practices. Enjoy connecting with attendees at breaks and receptions.

Innovate! Sessions

Tuesday, May 23, 7:00–8:30 am PDT

Connect with your industry partners and get the inside track on new technologies and services during 30-minute educational presentations designed for the public health laboratory community. See pages 21–23 for details on these presentations.

Session Topics

APHL solicits session proposals from its standing committees and the general membership, which results 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 2023 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	GEN	General Laboratory Practices
ETH	Ethics	SHC	Safety: Hazard Control
MLD	Management and Leadership	SRV	Surveillance
COM	Communication	INF	Informatics
SEC	Security	MCB	Microbiology
EMR	Emergency Management and Response	CHM	Chemistry
WFT	Workforce Training	BIO	Bioinformatics
		RES	Research

Sunday, May 21, 2023

9:00 am – 5:00 pm

Preconference Workshop ▼

Room A6

Laboratory Design Matters: Improving Biosafety and Biosecurity Through Efficient Facility Design, Maintenance and Risk Assessment Practices

QLM QMS MLD

588-840-23 • 6.5 contract hours for this session

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

Speakers:

- Warren J. Hendrickson, AIA LEED AP, BD+C, Public Health Director, HDR, Inc.
- Michael Mottet, LEED AP, Principal Laboratory Planner, HDR, Inc.
- Victor Waddell, PhD, Laboratory Director, Arizona State Public Health Laboratory

This interactive workshop will help participants improve biosafety and biosecurity, including Biosafety Level 3 (BSL-3), through efficient facility design, maintenance and risk assessment practices. Attendees will participate in interactive sessions to illustrate best practices concepts found in the **Laboratory Facility Construction and Major Renovation Guidelines**. Discussions and hands-on interaction will cover parts 1–10 of the Guidelines. **Participants are required to bring their own laptop in order to optimize participation during interactive sessions; internet will be available in the workshop room.**

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

3:00 pm – 7:00 pm

Registration

Ballroom A Pre-function

Monday, May 22, 2023

7:00 am – 6:00 pm

Registration

Ballroom A Pre-function

7:30 am – 8:30 am

Coffee Break

A2–A11 Hallway

8:00 am – 11:30 am Preconference Workshops ▼*Separate, advance registration required.***Creating an Inclusive Laboratory Culture by Addressing Unconscious Bias****COM** **MLD** **COM**

Room A6 • 588-841-23 • 3.0 contact hours for this session

Speaker: Marisa Hattab, Diversity, Equity, and Inclusion Officer for Douglas County of Nebraska**Facilitators:**

- Leandra Jones, MS, PhD, APHL ID Fellow, Tennessee Public Health Laboratory
- Jenna Laine, EdD, Point of Care Supervisor, Minnesota Department of Health
- Sharon Massingale, PhD, HCLD/CC(ABB), Laboratory Director, Alabama Public Health Laboratory
- Kim Smith, MS, Laboratory Supervisor, Compliance, Houston Health Department
- Anna Strain, PhD, Manager, Infectious Disease Laboratory, Minnesota Public Health Laboratory
- Kathleen Street, MS, PMP, Manager, Leadership, Association of Public Health Laboratories
- Denise Toney, PhD, HCLD(ABB), Laboratory Director, Virginia Division of Consolidated Laboratory Services

This preconference workshop will introduce the concept of Unconscious Bias and how it plays a role in staff interactions and the overall culture within public health laboratories. Effective working relationships and clear communication can positively impact laboratory productivity and improve workplace culture. Attendees will collaborate to start the conversation on how unconscious bias plays out in their lab and how it can be overcome through intentional behavior.

Diagnosing the Organizational Climate of Your Laboratory**COM** **MLD** **COM**

Room A11 • 588-842-23 • 3.0 contact hours for this session

Speakers:

- Crystal Barrett, MAED/T, MLS(ASCP)cm, Laboratory Systems Improvement and Training Manager, Virginia Division of Consolidated Laboratory Services
- Marilyn Freeman, PhD, M(ASCP), Deputy Director, Virginia Division of Consolidated Laboratory Services
- Lucy Maryogo-Robinson, MPH, Director, Global Health, Association of Public Health Laboratories
- Timothy Southern, PhD, D(ABMM), Laboratory Director, South Dakota Public Health Laboratory

Laboratory leaders are responsible for creating strategies that move the mission and the organization forward. Management consultant Peter Drucker has previously been quoted as saying “culture eats strategy for breakfast.” In other words, a healthy culture determines the success of your organization. As we work to move past the recent SARS-CoV-2 pandemic, laboratory leaders have witnessed the tangible effects of a national emergency superimposed upon a less than optimal organizational culture, resulting in significant staffing challenges in addition to the reduced ability to address emergent issues that require adaptability, collaboration, and innovation. This session will introduce laboratory leaders to the importance of nurturing the work environment and explore ways to positively impact not only those we employ, but also the communities we serve.

11:30 am – 1:30 pm **Lunch** *(on your own)*

11:30 am – 1:00 pm **Laboratory Directors Lunch** *(by invitation only)*

1:30 pm – 2:00 pm **Welcome to Sacramento**

Ballroom A1

Speakers:

- Daphne Ware, PhD, APHL President and Director, Mississippi Public Health Laboratory
- Tim Southern, PhD, President-Elect, APHL 2023 Planning Committee Chair and Director, South Dakota Public Health Laboratory
- Tomas Aragon, MD, DrPH, Director, California Department of Public Health and State Public Health Officer
- Anthony Tran, DrPH, MPH, D(ABMM), Director, California Public Health Laboratory
- Anthony Gonzalez, PhD, Director, Sacramento County Public Health Laboratory
- Scott Becker, MS, APHL Chief Executive Officer

2:00 pm – 3:00 pm **Opening Plenary Session**

Ballroom A1

Reducing Health Inequity, Pursuing Health Equity and Seeking Health Justice **SEI** **ETH** **MLD**

588-800-23 • 1.0 contact hour for this session

Moderators:

- Marilyn Freeman, PhD, M(ASCP), Virginia Division of Consolidated Laboratory Services
- Marie-Claire Rowlinson, PhD, D(ABMM), Wadsworth Center, New York State Department of Health

Speaker: Jeffrey E. Hall PhD, MA, MSPH, CPH, Centers for Disease Control and Prevention

This session will stimulate thought about why and how we as a community must recognize and come together to reduce health inequities, pursue health equity and seek health justice. This session will also examine how structurally originated inequities in health impact public health laboratories, as it relates to access to high-quality care. Lastly, the presenter will highlight equity-conscious, structurally competent strategies for advancing health equity and illustrate how anti-racist praxis can move us towards a future where all have opportunities to become as healthy as possible.

3:00 pm – 3:30 pm **Rapid Poster Presentations ▶**

Ballroom A1

Detailed listing on next page.

3:00 pm – 6:30 pm **Exhibit Hall Open**

Exhibit Halls AB

3:30 pm – 4:00 pm **Break**

Exhibit Halls AB

Rapid Poster Presentations

Monday, May 22, 3:00–3:30 pm

Moderator: Jelili Ojodu, MPH, Association of Public Health Laboratories

P-73 The Future Workforce of the Environmental Laboratory

Presenter: Kathryn Wangsness, Arizona Bureau of Laboratory Services,
kathryn.wangsness@azdhs.gov

**P-106 Inventory and Evaluation of Laboratory Informatics Systems:
A How-to Guide**

Presenter: Monica Akre, J Michael Consulting, makre@jmichael-consulting.com

P-157 West Nile Virus Surveillance in Ohio

Presenter: Shelby Anders, Ohio Public Health Laboratory, shelby.anders@odh.ohio.gov

**P-119 Rapid Identification and Response of a *Salmonella Typhimurium*
Outbreak Traced to Raw Alfalfa Sprouts, Nebraska, 2022**

Presenter: Stevie McGill, Nebraska Public Health Laboratory, stmcgill@unmc.edu

**P-90 Training the Next Generation of Laboratory Scientists During the
Covid-19 Global Pandemic**

Presenter: Reginald Blackwell, DC Public Health Laboratory, reginald.blackwell@dc.gov

P-104 Pacific Rim Consortium Quality Project

Presenter: Katie Bolin, International Responder Systems,
katiebolin@internationalresponderssystems.com

**P-127 Maximizing Efficiency in Arboviral Mosquito Surveillance Through
Multiplex Polymerase Chain Reaction and Sample Pooling**

Presenter: Rebecca Lovell, New Hampshire Public Health Laboratory,
rebecca.a.lovell@dhhs.nh.gov

**P-31 Molecular Detection of OXA β -Lactamase Genes in Antimicrobial-
Resistant Bacteria**

Presenter: Eagle Bui, New Jersey Department of Health, eagle.bui@doh.nj.gov

**P-171 Developing Laboratory-specific Risk Assessment Tools for Emerging
Infectious Diseases**

Presenter: Andrea Causey, South Carolina Department of Health and Environmental Control,
causeyam@dhec.sc.gov

**P-191 Development of *Candida auris* Surveillance RT-PCR Test in a Prison
Hospital Setting**

Presenter: Filipe Cerqueira, The University of Texas Medical Branch, fmcerque@utmb.edu

**P-112 Potential Transmission Dynamics of blaKPC in an Ongoing Outbreak
Response Involving Multiple Bacterial Genera**

Presenter: Jennifer Dale, Minnesota Public Health Laboratory, jennifer.dale@state.mn.us

P-01 Public Health Laboratory Construction and Renovation Helpful Tips

Presenter: Lisa Wallace, West Virginia Office of Laboratory Services, lisa.m.wallace@wv.gov

P-184 Pilot Program of Tennessee Department of Health — Private Well Water and Emergency Response Test Kit Program

Presenter: Patrick Leathers, Tennessee Department of Health: Laboratory Services, patrick.leathers@tn.gov

P-77 PFAS Detection in Drinking Water Method Development

Presenter: John Fennessey, Colorado Department of Public Health and Environment, john.fennessey@state.co.us

P-86 Prevalence of *Mycoplasma genitalium* Among High-risk Persons in Dallas County

Presenter: Margaret Gearhart, Dallas County Health and Human Services, gearhartm33@outlook.com

P-23 AwaRe Classification: Increasing Use of Access Antibiotics as a Stewardship Tool. Assessing Its Effectiveness in Decreasing Resistance Patterns — A Retrospective Study

Presenter: Mohamed Gomaa, APHL-CDC, spockegypt@gmail.com

P-04 Establishment of Whole Genome Sequencing to Predict Resistant Strains of *Mycobacterium tuberculosis*

Presenter: Whitney Heard, Alabama Bureau of Clinical Laboratories, whitneyheard97@gmail.com

P-161 Anatoxin-a and Saxitoxin: Cyanotoxins of Increasing Frequency in Pennsylvania Freshwater Bloom Events

Presenter: Pamela Higgins, Pennsylvania Department of Environmental Protection, pahiggins@pa.gov

P-55 Lessons from Lesions: Trends in Specimen Submissions and Test Performance During the 2022 Mpox Outbreak in New York City

Presenter: Scott Hughes, New York City Public Health Laboratory, shughes@health.nyc.gov

P-10 Knowledge Management Resources for Public Health Laboratories

Presenter: Amanda Hughes, State Hygienic Laboratory at the University of Iowa, amanda-hermann@uiowa.edu

P-42 Performance Evaluation of Genomic Analysis Tools for *Shigella* and Enteroinvasive *Escherichia coli* Species Identification and Serotype Prediction

Presenter: Linlin Li, California Department of Public Health, linlin.li@cdph.ca.gov

For more details, be sure to view these posters in the exhibit hall or online through 3:30 pm on Wednesday, May 24.

4:00 pm – 5:00 pm **Plenary Session**

Ballroom A1

Wildfires, Droughts, and Floods, Oh My! **COM** **MLD** **COM**

588-801-23 • 1.0 contact hour for this session

Moderator: Paul Kimsey, DrPH, California Department of Public Health (retired)

Speakers:

- Merideth Milet, MPH, California Department of Public Health
- Rad Cunningham, MPH, MPA, Washington State Department of Health
- Jason Wilken, PhD, MPH, California Department of Public Health

The consequences of climate change have serious adverse impacts on public health and infrastructure. The session aims to discuss the laboratory's role in measuring the effects of those consequences, what types of data are produced and how the data are used to inform prudent decision making.

5:00 pm – 6:30 pm

Exhibit Halls AB

Welcome Reception

Sponsored by Roche Diagnostics

Poster Session 1

Poster authors 1–107 available to discuss their posters

Tuesday, May 23, 2023

6:30 am – 6:00 pm

Ballroom A Pre-function

Registration

6:30 am – 8:30 am

A2–A11 Hallway

Light Breakfast

Sponsored by the Innovate! session companies

7:00 am – 7:30 am

Innovate! Sessions (details on pages 21–22 ►)

Abbott Laboratories • Rooms A9/10

Clear Labs • Room A6

Hologic • Rooms A7/8

Streck • Room A11

Waters Corporation • Rooms A2/3

8:00 am – 8:30 am

Innovate! Sessions (details on pages 22–23 ►)

Bio-Rad Laboratories • Room A6

Illumina • Room A11

PerkinElmer • Rooms A7/8

QIAGEN • Rooms A2/3

Roche Diagnostics • Rooms A9/10

Agenda continues on page 24 ►

Innovate! Sessions

Tuesday, May 23, 7:00–7:30 am

Streamlining STI Testing at a Public Health Laboratory

presented by Abbott Laboratories • Rooms A9/10

Optimizing sexually transmitted infection testing (STI) at a dynamic public health laboratory requires an innovative and flexible strategy that universally simplifies patient sample collection as well as testing. In this session we will share our experience with the integration of the Alinity m STI assay and Multi-Collect Specimen Collection Device into our testing program and the efficiency outcomes achieved with the Alinity m system.

Speaker: Godfred Masinde, PhD, San Francisco Public Health Laboratory

An End-to-End Genomic Solution That Will Empower and Decentralize Microbial Surveillance Efforts to Pave the Way Towards the Public Health of Tomorrow

presented by Clear Labs • Room A6

Clear Labs' latest genomics solution, the Clear Dx Microbial Surveillance, seeks to empower public health laboratories, healthcare establishments and private hospitals to conduct routine microbial surveillance, as well as outbreak investigations in a decentralized model. Subject matter experts in the field will be sharing their experience deploying NGS technologies for surveillance and outbreak investigations, as well as discussing the impact and implications in the public health space.

Moderator: Ramin Khaksar, Clear Labs

Speakers:

- Mark Pandori, PhD HCLD(ABB), Nevada State Public Health Laboratory
- Charles Vaske, PhD, Clear Labs
- Michael Wiley, PhD, University of Nebraska Medical Center and PraesensBio LLC

***Mycoplasma genitalium*: The Southeastern States Prevalence Study and the Future of Testing Within Public Health**

presented by Hologic • Rooms A7/8

Mycoplasma genitalium (*M. gen*) is a highly prevalent sexually transmitted infection (STI) that is often mis-diagnosed. Join this session with some of the state lab directors who participated in a multi-state *M. gen* prevalence study across the Southeast. The panel discussion will highlight the regional partnership behind the study and how it was formed, key findings from the research, and dive into the future outlook of *M. gen* testing across public health. The panelists will also share their experiences conducting the study, and will discuss current challenges and benefits of generating data to support *M. gen* testing.

Speakers:

- Susanne Crowe, MHA, Florida Bureau of Public Health Laboratories
- William A. Glover, II, PhD, D(ABMM), MT(ASCP), North Carolina State Laboratory of Public Health
- Marie Claire Rowlinson, PhD, D(ABMM), Wadsworth Center, New York State Department of Health

More



Methods for Antimicrobial Resistance Mechanism Testing in Wastewater

presented by Streck • Room A11

The session will describe current methodology for AMR testing in wastewater and how sample concentration combined with comprehensive detection of AMR mechanisms are essential for identification and epidemiologic surveillance of these pathogens in the community.

Speaker: Chris Connelly, PhD, Streck

Expanding the Horizons in Detection of Emerging Contaminants Using UPLC-MS

presented by Waters Corporation • Rooms A2/3

Liquid Chromatography/Tandem-Mass Spectrometry (LC/MS/MS) is a powerful tool for the analysis of various analytes in a wide variety of matrices. What is especially attractive about LC/MS/MS is its sensitivity and selectivity. Microcystins, in particular, represent an emerging class of algal toxins of concern to the drinking water industry. In this talk we investigate the use of smaller column packing (sub 2µm particles) to screen for many of these toxins using a generic gradient method. Specifically, microcystins, anatoxin-a, cylindrospermopsin as well as newer toxins, such as anabaenopeptins, deoxy cylindrospermopsin and micropeptin, using Ultra-Performance Liquid Chromatography (UPLC®) combined with tandem mass spectrometry.

In addition, we will discuss the application of LC/MS/MS for analysis of emerging contaminants including Per- and Polyfluoroalkyl Substances (PFAS), or “forever chemicals “ as they have been labeled, and personal care products, pharmaceuticals, pesticides and herbicides. Finally, a novel ionization method called UniSpray, that offers enhanced sensitivity for these compounds normally analyzed by ESI, will be highlighted.

Speaker: Stuart Oerhle, Waters Corporation and Northern Kentucky University

Tuesday, May 23, 8:00–8:30 am

Wastewater Testing: A New Paradigm in Rural Community Health and Protection

presented by Bio-Rad Laboratories • Room A6

Wastewater monitoring is a valuable, cost-effective, non-intrusive method for the detection of circulating infectious disease pathogens. It is particularly powerful as a community-level proxy for disease transmission in the absence of widespread individual testing. Our team has developed a robust statewide wastewater testing program built around the Bio-Rad digital PCR platform. Here I discuss the benefits and challenges to maintaining an agile wastewater testing program to monitor the health of rural, highly dispersed communities.

Speaker: Timothy Driscoll, PhD, West Virginia University

More



Broad Surveillance of Viral and Antimicrobial Resistant Pathogens in Wastewater

presented by Illumina • Room A11

Monitoring wastewater for infectious diseases and antimicrobial resistance is an important means to aid public health professionals in predicting upcoming trends in communities. However, there are a myriad of methods for collecting, concentrating microbes, and extracting nucleic acids from wastewater samples. We provide a framework for collecting and concentration methods and their impact on variety and types of pathogens detected and highlight the benefits of NGS assays to provide a comprehensive view of wastewater surveillance.

Speaker: Keyley H. Janssen, PhD, Wisconsin State Lab of Hygiene

Transforming Workflow Improvements in Public Health Laboratories

presented by PerkinElmer • Rooms A7/8

This session will address evolving needs of clinical and public health laboratories by providing complete, innovative workflows for newborn screening, immunodiagnostics, consumer health services, clinical genomics and automation solutions.

Speaker: Aneil Weber, PerkinElmer

Following the FLOW to Strengthen Surveillance: Wastewater Testing Beyond SARS-CoV-2

presented by QIAGEN • Rooms A2/3

In this session, we discuss the utility of Wastewater Surveillance as a valuable tool in the pandemic, how WWS can provide valuable insights into future active and/or emerging outbreaks, and discuss real-world applications and data to strengthen public health.

Speakers:

- Joshua Boston, QIAGEN, LLC
- Sarah Kane, PhD, GT Molecular
- Brenden Bedard, Genesee & Orleans County Public Health

HCV Infection Elimination by 2030: A Diagnostic Approach to Streamline Care

presented by Roche Diagnostics • Rooms A9/10

The presentation will focus on the significance of Screening in the cascade of viral hepatitis to enable linkage to care and how the role of an HCV antigen based diagnostics approach can advance the efforts toward HCV elimination in the US.

Speaker: Kwaku Tawiah, PhD, Roche Diagnostics

8:00 am – 9:30 am Coffee Break

Ballroom A Pre-function

9:00 am – 10:00 am Plenary Session**Newborn Screening and Genetic Privacy: Where Do We Go From Here?****NBS** **MLD** **ETH**

Ballroom A1

588-802-23 • 1.0 contact hour for this session

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

- Aaron Goldenberg, MPH, PhD, Case Western Reserve University School of Medicine
- Amy Gaviglio, MS, CGC, Connetics Consulting

This session will discuss the ongoing litigation involving the Michigan (MI) newborn screening (NBS) program and the MI Biotrust (Kanuszewski v. MDHHS, 18-cv-10472 (EDMI, 2018)), as well as the New Jersey (NJ) state police department's subpoena on the NJ NBS program for access to a residual dried blood spot for use in a criminal investigation of the child's father. The implications for national NBS programs will also be discussed.

10:00 am – 10:30 am Rapid Poster Presentations ►

Ballroom A1

Detailed listing on next pages.

10:00 am – 6:30 pm Exhibit Hall Open

Exhibit Hall AB

10:30 am – 11:00 am Break

Exhibit Halls AB

Sponsored by Clear Labs**11:00 am – 12:00 pm Concurrent Sessions ▼****Stranger Things: Public Health Edition** **DDT** **MCB** **GEN**

Ballroom A1

588-803-23 • 1.0 contact hour for this session

Moderators:

- Marie-Claire Rowlinson, PhD, D(ABMM), Wadsworth Center, New York State Dept. of Health
- Timothy Southern, PhD, D(ABMM), South Dakota 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 the ID Committee's 6th year coordinating this popular quiz-based session, we are revamping with a new name and format! We will continue to challenge a panel of experts and the audience with diagnostic conundrums. Our panel of experts will consist of three teams. Cases will be collated and presented by two cohosts, who will ensure appropriate content and delivery. So, let's see which team triumphs! Or will it be the audience that prevails?

Rapid Poster Presentations

Tuesday, May 23, 10:00–10:30 am

Moderator: Shari Shea, MHS, Association of Public Health Laboratories

P-165 Optimized Methods for Antimicrobial Resistance Testing

Presenter: Dylan Barbera, QIAGEN, Inc., dylan.barbera@qiagen.com

P-11 Centralizing Electronic Laboratory Reporting (ELR) Beyond COVID-19: Challenges, Lessons, and Considerations for the Future

Presenter: Victor Lee, Clinical Architecture, victor_lee@clinicalarchitecture.com

P-97 Impact of the Covid-19 Pandemic on Workforce Development Preferences

Presenter: Sam Marcellus, Florida Bureau of Laboratories, smarcellus00@gmail.com

P-12 Ebola Biosafety Response: Then and Now

Presenter: Michael Pentella, State Hygienic Laboratory at the University of Iowa, michael-pentella@uiowa.edu

P-121 Evolution of Echinocandin Resistance in Massive Southern Nevada Outbreak

Presenter: Lauryn Massic, Nevada State Public Health Laboratory, lmassic@unr.edu

P-151 Implementation of a Targeted Nanopore Sequencing Assay for Antimicrobial Resistance Detection in *Mycobacterium tuberculosis*

Presenter: Shannon Murphy, Wadsworth Center, New York State Department of Health, shgmurphy@gmail.com

P-61 Characterization of US Urogenital and Extragenital Meningococcal Isolates Collected Through the Enhanced Gonococcal Isolate Surveillance Project

Presenter: GUL Mehnaz Mustafa, Centers for Disease Control and Prevention, mzv2@cdc.gov

P-201 Can Commercially Available Field Tests Reliably Detect Trace Methamphetamine?

Presenter: William Naviaux, University of Wisconsin, Madison, willnavx@gmail.com

P-138 LIS Automation of a Point of Care Field Deployable Laboratory

Presenter: Joseph Ochal, New Jersey Department of the Health, joseph.ochal@doh.nj.gov

P-141 Preparing for the Next Surge: Building Resilient Inventory Management at New Jersey Public Health and Environmental Laboratories

Presenter: Hanayo Cheung, New Jersey Department of Health, hanayo.cheung@doh.nj.gov

P-199 This Test Is Outta Here!

Presenter: Greg Hovan, Delaware Public Health Laboratory, gregory.hovan@delaware.gov

Tuesday, May 23

P-208 Improving Visibility of Quality Indicators Through Automated Dashboarding: An Effective Way to Enhance Laboratory Quality Management System

Presenter: Nevada Ruehlen, Washington Public Health Laboratory, nevada.ruehlen@doh.wa.gov

P-94 Comparison of Nucleic Acid Extraction Methods for Detection of *Candida auris* Assessed Using RT-PCR and Next Generation Sequencing

Presenter: Leanna Sealey, DC Public Health Laboratory, leannasealey@hotmail.com

P-18 ETOR: A National Solution

Presenter: Rachel Shepherd, Association of Public Health Laboratories, rachel.shepherd@aphl.org

P-155 Deficiency Dilemma — A Systematic Approach for an Audit Response

Presenter: Scott Shone, North Carolina State Laboratory of Public Health, scott.shone@dhhs.nc.gov

P-196 Development and Implementation of a Canine Infectious Respiratory Disease Panel (CIRD)

Presenter: Teddy Spikes, Tifton Veterinary Diagnostic and Investigational Lab, trs53790@uga.edu

P-180 A Panther Fusion Clade II Mpox Lab Developed PCR Assay Optimization Using the Open Access System

Presenter: Rebecca Villa, State Hygienic Laboratory at the University of Iowa, rvilla@uiowa.edu

P-173 Impact of Birthweight on TREC-based SCID Screening

Presenter: Cory Weaver, South Carolina Department of Health and Environmental Control, weavercj@dhec.sc.gov

P-88 Maximizing Lessons Learned from Past Outbreaks to Develop a Sustainable Laboratory Cross-training Program

Presenter: Channyn Williams, DC Public Health Laboratory, channyn.williams@dc.gov

P-110 Implementing Automated Extraction for High Throughput Environmental Testing

Presenter: Maggie Wills, Maryland Department of Health, mawills1124@gmail.com

P-85 Changes in the Correlation Between Clinical Cases and Levels of SARS-CoV-2 RNA in Colorado Wastewater

Presenter: Jim Huang, Colorado State University, jim.huang@colostate.edu

For more details, be sure to view these posters in the exhibit hall or online through 3:30 pm on Wednesday, May 24.

PFAS: The Rapidly Evolving Landscape of Laboratory Testing and Public Policy AVE CHM

Rooms A2/3

588-804-23 • 1.0 contact hour for this session

Moderator: Shane Olund, Minnesota Department of Health

Next Generation Laboratory Testing for PFAS Across Matrices at High Sensitivity

- Sin Urban, PhD, Maryland Laboratories Administration

Current Approaches and Key Challenges in Deriving Drinking Water Guidance for PFAS

- Helen Goeden, PhD, Minnesota Department of Health

US EPA Drinking Water PFAS Update

- Greg Carroll, US Environmental Protection Agency

This plenary will provide a broad overview of the current state of PFAS knowledge and activities to help state and local laboratories determine their potential role and involvement in current and future testing.

Tackling the IT Hurdles of Building Bioinformatics Capacity in Public Health Laboratories DAT BIO

Rooms A7/8

588-805-23 • 1.0 contact hour for this session

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

Speakers:

- Marty Sibley, Association of Public Health Laboratories
- Kelly Oakeson, PhD, Utah Public Health Laboratory

This session will talk about the challenges and concerns of IT security and privacy with the need to expand computing infrastructure to support the needs of bioinformatics in public health laboratories.

Building Biosafety Fundamentals with Non-Traditional Testing Sites BIOS GEN SHC BIO

Rooms 9/10

588-806-23 • 1.0 contact hour for this session

Moderator: Victor De Jesus, PhD, Centers for Disease Control and Prevention

Speakers:

- Julianne Baron, PhD, CPH, RBP, Science and Safety Consulting, LLC
- Carrie Anglewicz, MS, Michigan Public Health Laboratory
- Peter Davis, Colorado Public Health Laboratory

APHL, CDC and PHLs have successfully partnered with Non-Traditional Testing Sites (NTTS) providing guidance and support, especially as it pertains to biosafety and testing during infectious disease outbreaks. This session will discuss how different institutions have successfully provided biosafety outreach to NTTS including two APHL/CDC Biosafety Preparedness Workshop for Non-Traditional Testing Sites conducted in 2022. Both trainings were developed to assist NTTS with safely implementing new technologies when utilizing point-of-care testing.

12:00 pm – 1:30 pm

Exhibit Halls AB

Lunch (in the exhibit hall)

Poster Session 2

Poster authors 108–214 available to discuss their posters

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

Understanding and Applying High-Resolution Mass Spectrometry to Solve Public Health Problems **DDT** **BIO** **RES**

Rooms A2/3

588-807-23 • 1.0 contact hour for this session

Moderator: Amy Watson, PhD, Centers for Disease Control and Prevention

Speakers:

- Mike Filigenzi, University of California, Davis
- James McCord, US Environmental Protection Agency
- Stefan Saravia, MPH, CIH, Minnesota Department of Health

This session will be an overview of High-Resolution Mass Spectrometry (HRMS) and non-target analysis. Participants will learn the fundamentals of how the instruments work and how they differ from traditional mass spectrometry. They will understand how data being generated from these instruments is interpreted and the variety of formats that the data can be delivered to the end user. They will also be provided with examples of a variety of projects that have used HRMS data to answer challenging research questions.

Developing Threat Agnostic Sequencing Capabilities and the Utility in Public Health Laboratories **NGS** **MCB** **BIO**

Rooms A7/8

588-808-23 • 1.0 contact hour for this session

Moderator: Matthew Mauldin, PhD, Centers for Disease Control and Prevention

Speakers:

- Brian Merritt, MS, The Johns Hopkins University Applied Physics Laboratory
- Michael Perry, MS, MS Ed, Wadsworth Center, New York State Department of Health
- Haejin Hwang, PhD, Minnesota Department of Health

A collaborative effort is currently underway between APHL, CDC, the Johns Hopkins University Applied Physics Laboratory, the New York State Department of Health – Wadsworth Center, and the Minnesota Department of Health Public Health Laboratory, to develop and optimize laboratory workflows and a bioinformatics pipeline for pathogen agnostic detection using direct-from-sample metagenomic sequencing of various sample types. These workflows will provide public health labs the ability to screen samples for a wide variety of pathogens.

Preparedness and Response Domestically and Abroad — The 2022 Ebola Outbreak

PAN

EMR

Ballroom A1

588-809-23 • 1.0 contact hours for this session

Moderator: Julie Villanueva, PhD, Centers for Disease Control and Prevention

Speakers:

- Trevor Shoemaker, PhD, MPH, Centers for Disease Control and Prevention
- Christina Egan, PhD, Wadsworth Center, New York State Department of Health
- Jason Opdyke, PhD, Department of Defense

On September 20, 2022, the Uganda Ministry of Health declared an outbreak of Ebola virus disease in Mubende District, Central Uganda. This session will cover how CDC and APHL supported the response to the outbreak in East Africa. The presentation will also review how the US Laboratory Response Network prepared to respond to this outbreak domestically and the lessons we were able to leverage from previous Ebola outbreaks.

The Future of Public Health Laboratory Design: Key Considerations in the Operation and Design of High-Containment Laboratories

PAN

MLD

EMR

Rooms A9/10

588-810-23 • 1.0 contact hours for this session

Moderator: Mike Moreland, LEED BD+C, Flad Architects

Speakers:

- Mike Moreland, LEED BD+C, Flad Architects
- Missy Pearce, PhD, Centers for Disease Control and Prevention
- Jared Machala, PE, LEED AP, WSP

The pandemic has reemphasized the importance of public health and reference lab emergency preparedness. The lack of high-containment lab capacity created unanticipated operational and responsiveness challenges that may have been tempered if these high-consequence laboratories were more readily available.

Tuesday, May 23

2:30 pm – 3:00 pm

Exhibit Halls AB

Break

Sponsored by Roche Diagnostics

3:00 pm – 4:00 pm

Concurrent Sessions ▼

50 Shades of Diseases: Understanding the Hurdles of Responding to an Emerging Pathogen PAN EMR SRV

Ballroom A1

588-811-23 • 1.0 contact hour for this session

Moderator: Jill Sutton, Association of Public Health Laboratories

Speakers:

- Michael Perry, MS, MS Ed, Wadsworth Center, New York State Department of Health
- Peter Iwen, MS, PhD, D(ABMM), F(AAM), Nebraska Public Health Laboratory
- Erika Buzby, Massachusetts State Public Health Laboratory

No two laboratories are the same. This session will discuss how public health laboratories have navigated emerging infectious disease responses, including the activation of surge capacity testing with emerging technologies, laboratory safety issues such as personal protective equipment and how to apply lessons learned to prepare for the next emerging threat.

Innovative Laboratory Surveillance Projects for Drug Overdose: Successes, Challenges and Future Directions MJH MLD EMR

Rooms A2/3

588-812-23 • 1.0 contact hour for this session

Moderator: Ewa King, PhD, Association of Public Health Laboratories

Innovative Laboratory Surveillance Projects for Drug Overdose: Successes, Challenges, and Future Directions

- Desiree Mustaquim, PhD, MPH, Centers for Disease Control and Prevention

Minnesota's Drug Overdose Surveillance — The Value of Laboratory Data

- Rosie Rushing, MS, Minnesota Department of Health

Development of the Overdose Data to Action Biosurveillance Program at the South Carolina Public Health Laboratory

- Beth Bair, MS, South Carolina Public Health Laboratory

In this session, CDC will provide an overview of Overdose Data to Action (OD2A) innovative surveillance activities, specifically highlighting laboratory testing of specimens collected from patients treated in emergency departments for nonfatal overdose and describe future plans for these activities beyond the current OD2A funding. State public health laboratory partners will present an overview of their experience implementing overdose biosurveillance, highlighting challenges, successes, and suggestions for future directions.

Innovative Uses of Wastewater Surveillance WSU SRV MCB

Rooms A7/8

588-813-23 • 1.0 contact hour for this session

Moderator: Enoma Omoregie, PhD, New York City Public Health Laboratory

Using Wastewater Surveillance to Investigate and Monitor a Polio Outbreak in New York

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

Beyond COVID: MPX and Other Pathogen Surveillance Through Wastewater for California Public Health Action

- Alexander Yu, MD, MPH, California Department of Public Health

Using Metagenomics to Monitor Pathogens in Washington DC's Wastewater

- Eric Vaughn, MPH, Washington, DC Public Health Laboratory

Expanding Wastewater Surveillance Beyond SARS-CoV-2

- Amy Kirby, PhD, MPH, Centers for Disease Control and Prevention

Wastewater surveillance has been shown to be a useful public health surveillance tool. In this session we will explore how wastewater surveillance can be used to monitor high-profile diseases such as polio, mpox, influenza, respiratory syncytial virus, norovirus, hepatitis, salmonellosis and others. We will also explore the future of this tool at the national level.

Everything, Everywhere, All at Once, Public Health Laboratory Edition – Applying WGS and AI to Advance Enteric Pathogen Surveillance

DAT INF MCB

Rooms A9/10

588-814-23 • 1.0 contact hour for this session

Moderator: Jennifer Peet, PhD, Palmona Pathogenomics, Inc.

Data Deluge and Need for Efficient, Advanced Analysis

- Megan Crumpler, PhD, Orange County (CA) Public Health Laboratory

Collaboration Objectives, Design and Integration

- Jennifer Peet, PhD, Palmona Pathogenomics, Inc.

Approach, Technology and Genomic Analysis

- Jonathon Monk, PhD, Palmona Pathogenomics, Inc.

Public Health Laboratory Investigations and Surveillance Today and Tomorrow

- Matt Zahn, MD, Orange County (CA) Health Care Agency

Can whole genome sequencing (WGS) and AI-enhanced techniques more rapidly and comprehensively assess surveillance trends? The session documents an active pilot aimed at using bioinformatics and genome analytics to support local public health surveillance. Use cases explore validation of AMR prediction from WGS, identification of emerging trends in virulence, correlations of genetic features and geographic mapping with epidemiological factors of *Salmonella* and *Shigella*.

4:00 pm – 4:30 pm**Break**

Exhibit Halls AB

4:30 pm – 5:30 pm**Concurrent Sessions ▼****Evolution of the OBTF: From Opioids to Everything Else****MJH****EMR****SRV**

Rooms A2/3

588-815-23 • 1.0 contact hour for this session

Moderator: Ewa King, PhD, Association of Public Health Laboratories**Speakers:**

- Amy Miles, Wisconsin State Laboratory of Hygiene
- Mei Baker, MD, ACMG, Wisconsin State Laboratory of Hygiene

The Overdose Biosurveillance Task Force (OBTF) was launched in 2019 to determine a role for public health labs in response to the opioids epidemic and has evolved its membership and scope twice, and published two guidance documents on the implementation of biosurveillance and on laboratory surveillance of neonatal abstinence syndrome. Now in its third iteration, a multidisciplinary group of subject matter experts are tackling polysubstance analysis.

Is Your Laboratory Ready for Metagenomics?**NGS****MCB****BIO**

Rooms A7/8

588-816-23 • 1.0 contact hour for this session

Moderator: Lisa Mingle, PhD, Wadsworth Center, New York State Department of Health**How Culture Independent Diagnostic Testing Is Changing Public Health**

- Dave Boxrud, MS, Centers for Disease Control and Prevention

No Isolate? Can Genomics Solve the Problem?

- Marie-Claire Rowlinson, PhD, D(ABMM), Wadsworth Center, New York State Department of Health

Coming to a Lab Near You: Highly Multiplexed-Amplicon Sequencing Panels for Subtyping PulseNet Pathogens

- A. Jo Williams-Newkirk, PhD, Centers for Disease Control and Prevention

This session will highlight the impact on public health laboratory (PHL) surveillance activities with the implementation of Culture Independent Diagnostic and Point of Care tests (CIDT/POCTs) in the clinical setting. It will provide examples of surveillance testing in PHLs, the challenges these programs face and genomic solutions being developed to enhance infectious disease surveillance activities. Examples will include impact of CIDT on foodborne disease surveillance and metagenomic technologies of the future.

Laboratory Leadership and Management: Laboratory Systems Perspective

WDT MLD WFT

Ballroom A1

588-817-23 • 1.0 contact hour for this session

Moderator: Kajari Shah, MPH, Association of Public Health Laboratories

Speakers:

- Marty Soehnlen, PhD, MPH, PHLD(ABB), Michigan Bureau of Laboratories
- Kara Levinson, PhD, MPH, D(ABMM), Tennessee Department of Health: Laboratory Services
- Uzma Bashir, MBBS, PhD, World Health Organization

The Global Health and Workforce Development Committees submit a joint session on laboratory leadership from a systems perspective. Speakers will present domestic and global laboratory leadership training examples which support the professional development of laboratory leaders. A commitment to workforce development is essential to prepare for future pandemics and overall laboratory system strengthening. Leadership programs will include the Emerging Leader Program, New Laboratory Director Orientation, Laboratory Leaders of Today as well as the Global Laboratory Leadership Programme.

Advancing ETOR in Public Health Laboratories INF COM INF

Rooms A9/10

588-818-23 – 1.0 contact hour for this session

Moderator: Rebecca McNall, Centers for Disease Control and Prevention

Speakers:

- Jasmine Chaitram, MPH, Centers for Disease Control and Prevention
- Michelle Meigs, MBA, Association of Public Health Laboratories
- Laurel Boyd, MPH, Oregon State Public Health Laboratory

Public health laboratories (PHLs) provide critical testing for healthcare facilities. Ideally, these orders and results are exchanged electronically, however, many PHLs rely on manual processes for some or all of the orders they receive and results they return. CDC is collaboratively working to advance electronic test ordering and results reporting (ETOR) between PHLs and their submitters to enhance timely and accurate exchange of laboratory data for patient care and public health surveillance.

5:30 pm – 6:30 pm

Exhibit Halls AB

Networking Reception

Sponsored by Thermo Fisher Scientific

Tuesday, May 23

7:00 am – 5:30 pm

Ballroom A Pre-function

Registration

7:00 am – 8:00 am

A2–A11 Hallway

Coffee Break

7:30 am – 8:30 am

Roundtable Sessions ▼

Storytelling for Advocacy to Promote Sustainable Public Health

Laboratory Funding **COM** **COM** **MLD**

Meeting Room 1

588-819-23 – 1.0 contact hour for this session

Moderator: Kate Wainwright, PhD, MPH, MPA, MSN, Centers for Disease Control and Prevention

Speakers:

- Amanda Cosser, MPH, Association of Public Health Laboratories
- Frances Downes, DrPH, Michigan State University
- Michelle Forman, Association of Public Health Laboratories

Brief presentation and roundtable discussion on identifying urgent laboratory funding needs, collecting representative data and drafting advocacy materials

Pathways to Public Health Laboratory Careers: Help Us Help You

PAR **COM** **WFT**

Room A4

588-820-23 • 1.0 contact hour for this session

Moderator: Leslie Wolf, PhD, Louisville Metro Public Health and Wellness Laboratory

Panelists:

- Kara Mitchell, PhD, Wadsworth Center, New York State Department of Health
- Mui Koltunov, PhD, California Environmental Protection Agency
- Heather Seymour, Michigan Bureau of Laboratories

Panel will discuss innovative strategies to build sustainable bridges between academic institutions and public health laboratories, and highlight relevant, existing APHL-developed tools. Panelists and attendees will be asked to share their successes and challenges to building or sustaining these academic partnerships, to offer solutions and to give feedback on specific skills needed for the future laboratory workforce.

Post-Market Evaluation of Culture-Independent Diagnostic Tests

DDT QMS GEN

Room A5

588-821-23 • 1.0 contact hour for this session

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

The Role of Public Health in Identifying and Responding to CIDT Performance Issues

- Dave Boxrud, MS, Centers for Disease Control and Prevention

The Role of Clinical Laboratories in Identifying and Responding to CIDT Performance Issues

- Cristina Costales, MD, Keck School of Medicine of University of Southern California

The Role of CIDT Manufacturers in Identifying and Responding to CIDT Performance Issues

- Kevin Bourzac, PhD, Biomerieux, Inc.

The Role of the FDA in Identifying and Responding to CIDT Performance Issues

- Ryan Karsner, MD, US Food and Drug Administration

Molecular culture-independent diagnostic tests (CIDTs) are now a common method for detection of foodborne pathogens. Gastro-intestinal panel CIDTs generally have high performance characteristics but there are instances where specific targets perform poorly. This session will discuss the difficulties identifying CIDT performance issues and how customers can respond to performance issues to mitigate the effect of poorly performing tests.

Envisioning the Next 20 Years of the Laboratory Response Network

SLS MLD EMR

Room A6

588-822-23 • 1.0 contact hour for this session

Moderator: Jill Taylor, PhD, Association of Public Health Laboratories

Speakers:

- Julie Villanueva, PhD, Centers for Disease Control and Prevention
- Christina Egan, PhD, Wadsworth Center, New York State Department of Health
- Jeremy Corrigan, DrPH, County of San Diego Health & Human Services Agency

The Laboratory Response Network (LRN) was established in 1999 to improve the readiness of the US to respond to bioterrorism, however, since its inception the LRN has evolved and now supports response to a wide range of public health threats. This roundtable session will look at the successes and challenges of past LRN responses and explore strategies for improving the future of the LRN.

Launching the Public Health Career Ambassador Initiative

WDT MLD WFT

Room A11

588-823-23 • 1.0 contact hour for this session

Moderator: Aubrey Galusha, PhD, Wadsworth Center, New York State Department of Health

Speakers:

- Cory Weaver, PhD, South Carolina Department of Health & Environmental Control
- Adolfo Lara, PhD, Houston Health Department
- TaLesha Barnes, MSPH, US Virgin Islands Department of Health
- Rachel Zinner, MS, Kentucky Department for Public Health

This session will feature the experiences of first-generation public health ambassadors — a pilot program launched by Cohort 16 of the Emerging Leader Program with the goal of enhancing recruitment prospects for entry-level public health laboratorians.

8:00 am – 9:00 am Coffee Break

Ballroom A Pre-function

9:00 am – 10:30 am Awards Ceremony and Breakfast

Ballroom B2/4/6/8/10
and Rooms 9–10
Sponsored by Hologic

10:00 am – 3:30 pm Exhibit Hall Open

Exhibit Halls AB

10:30 am – 11:00 am Break

Exhibit Halls AB
Sponsored by Roche Diagnostics

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

Advance Microbial Source Tracking Using Next Generation Sequencing

NGS SRV MCB

Rooms A2/3

588-824-23 • 1.0 contact hour for this session

Moderator: Kayley Janssen, PhD, Wisconsin State Laboratory of Hygiene

Utilization of rRNA Deep Sequencing for Monitoring Organisms Contribution to Wastewater

- Marc Johnson, PhD, University of Missouri

Application of Meta-SourceTracker for Tracking Pollution in the Tijuana River

- Scott Kelley, PhD, San Diego State University

FORENSIC, An Online Platform for Fecal Source Identification using 16S rRNA Gene Amplicons

- Adélaïde Roguet, PhD, Wisconsin State Laboratory of Hygiene

Water pollution caused by fecal contamination, especially human origin, is an acute public health risk. Therefore, tracking the source of fecal pollution is essential to assess, prevent, and remediate sanitation issues. This session will describe the advancement of high-throughput sequencing as one of the most performant ways to conduct microbial source tracking in environmental samples.

A Fireside Chat with Industry Medical Partners PAR MLD COM

Ballroom A1

588-825-23 • 1.0 contact hour for this session

Moderator: Marie-Claire Rowlinson, PhD, D(ABMM), Wadsworth Center, New York State Department of Health

Speakers:

- Jennifer Rakeman-Cagno, PhD, Senior Director, Medical Affairs - Public Health Programs, Cepheid
- Denise Heaney, PhD, Chief Medical Partner, Molecular Lab and Infectious Diseases Network, VP Medical and Scientific Affairs, Roche Diagnostics
- Andrea Prinzi, PhD, MPH, SM (ASCP), Infectious Disease Medical Science Liaison, US Medical Affairs, bioMérieux, Inc.
- Glen Hansen, PhD, FCCM, D(ABMM), Chief Medical Officer, Seegene USA, Inc.
- Ashley Nenninger, PhD, Sr. Manager, Scientific Affairs, Hologic

Diagnostic manufacturers partner with clinical laboratories routinely for studies and other high medical-value activities. As such, public-private partnerships have long been demonstrated to provide benefits for both parties; so why aren't there more PHL-industry collaborations? In this session, members of the industry medical community will discuss their current initiatives that impact public health, including future goals, and propose areas for collaboration.

The Laboratory Twinning Experience: Creating Bi-directional, Long-term Partnerships PAR MLD COM

Rooms A7/8

588-826-23 • 1.0 contact hour for this session

Moderator: Nicolas Epie, PhD, HCLD, TS(ABB), MLS (ASCP), South Carolina Department of Health & Environmental Control

Speakers:

- Sherrie Staley, MPH, Association of Public Health Laboratories
- Joseph Reed, PhD, Wyoming Public Health Laboratory
- Hanan Salim Al Kindi, MD, DTMH, FRCPATH, Oman Ministry of Health

Laboratory Twinning is the building of a long-term, bi-directional 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.

Family Feud for Public Health COM MLD COM

Rooms A9/10

588-827-23 • 1.0 contact hour for this session

Moderator: Ryan Bernard, MBA, Missouri State Public Health Laboratory

Speakers:

- Amanda Hughes, MCM, State Hygienic Laboratory at the University of Iowa
- Tammy Theisen, BS, Saginaw County Department of Public Health

Do you think you know it all? Join us as we test your knowledge in this interactive session that explores knowledge management tools and resources for members, key findings from the APHL Workforce Profile Survey, and current topics.

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

Exhibit Halls AB

1:30 pm – 2:30 pm **Member Assembly**

Ballroom A1

2:30 pm – 3:30 pm **Break and Raffle** (3:00 pm)

Exhibit Halls AB

3:30 pm – 4:30 pm **Concurrent Sessions ▼**

What Do We Do Now? Dealing with Challenging Investigations

AVE SRV MCB

Ballroom A1

588-828-23 • 1.0 contact hour for this session

Moderator: Kirsten Larson, MPH, Association of Public Health Laboratories

Adverse Event Reports Involving Delta-8 THC Products from the FDA CFSAN Adverse Event Reporting System (CAERS)

- Oliver Ou, PhD, US Food and Drug Administration

Preventing Environmental Exposures — Lead in Blueberries

- Sin Urban, PhD, Maryland Laboratories Administration

Thallium Toxicity: A Case Study in Collaboration

- Blake Elam, MS, Nevada State Public Health Laboratory

Sometimes, laboratories encounter investigations that can prove challenging. There may be an unusual pathogen or vehicle of exposure, or there may be questions about the legality of a product. Speakers from the FDA and states will describe investigations into products containing delta-8 THC, elevated lead in freeze-dried blueberries, and finding the source of thallium in a poisoning case.

Modernizing Next Generation Sequence Testing in the Cloud NGS BIO

Rooms A2/3

588-829-23 • 1.0 contact hour for this session

Moderator: Kelly Oakeson, PhD, Utah Public Health Laboratory

Speakers:

- Kelly Oakeson, PhD, Utah Public Health Laboratory
- Kelsey Florek, PhD, MPH, Wisconsin State Laboratory of Hygiene
- Joel Sevinsky, PhD, Theiagen Genomics

Public Health Laboratories have witnessed a large growth of Next Generation Sequencing (NGS) based testing and, in turn, increased demands for data analytics. Emerging cloud technologies are revolutionizing how data is stored, processed, utilized, and shared. This session will showcase how these technologies can provide cost-effective solutions that expand sequence testing capacity and optimize the processing and interpretation of NGS data for more effective public health decisions.

Building Blocks for Wellness, Retention, Inclusion and Trauma-Informed Care WDT MLD WFT

Rooms A7/8

588-830-23 • 1.0 contact hours for this session

Moderator: Lotte Mulder, PhD, American Society for Clinical Pathology

Speakers:

- Lotte Mulder, PhD, American Society for Clinical Pathology
- Dana Powell Baker, MBA, MS, MLS(ASCP)CM, Association of Public Health Laboratories

With the combined impact of the laboratory workforce shortages, the opioid epidemic, the pandemic, socio-political divisiveness and violence, our profession must develop better strategies to sustain our members and our ability to serve our communities. This session will discuss how laboratory members can create organizational cultures in which all employees can thrive and not just survive during challenging circumstances. Faculty will review tactical solutions with the potential to add unique value to your practice through discussion trauma-informed care, wellness challenges and practices. Additionally, faculty will present best practices to foster inclusion and retention of a diverse workforce. Finally, this session will cover strategies to help with individual responses to those events that are beyond our control.

Wednesday, May 24

The Value of Biomonitoring Programs: How Your State Can Improve Health Outcomes

BIOM

MLD

SRV

Rooms A9/10

588-831-23 • 1.0 contact hour for this session

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

Speakers:

- Mateusz Karwowski, MD, MPH, FAAP, Centers for Disease Control and Prevention
- Eric Bind, MPP, New Jersey Department of Health
- Nerissa Wu, MPH, PhD, California Department of Public Health

Biomonitoring has emerged as an important and versatile public health laboratory tool. Given the growing list of environmental and chemical challenges faced by jurisdictions, biomonitoring should be an integral part of every state's public health program. This session will provide an overview of what biomonitoring is, what it can accomplish, and how it is growing in use. Speakers will provide insight into national strategies, examples of how biomonitoring has been used to affect policy change and improve health outcomes, and conclude with an example of how states have successfully secured a permanent program.

4:30 pm – 5:00 pm

Break

Ballroom A Pre-function

5:00 pm – 6:00 pm

Dr. Katherine Kelley Distinguished Session

Ballroom A1

Moderator: Tim Southern, PhD, South Dakota Public Health Laboratory

Dr. Zubin Damania (AKA ZDoggMD)

Dr. Zubin Damania (AKA ZDoggMD) is a UCSF/Stanford trained physician and founder of Turntable Health, an innovative health care clinic and early model for Health 3.0. During his decade-long hospitalist practice, he began a shadow career under the pseudonym of ZDoggMD. His videos and live shows have since gone epidemically viral, with over a billion views across Facebook, YouTube and Instagram. As host of The ZDoggMD Show, one of the top health and medicine podcasts, Dr. Damania leads a passionate following of over three million clinicians and patients toward the vision of Health 3.0.

7:00 am – 12:00 pm **Registration**
Ballroom A Pre-function

7:00 am – 8:00 am **Coffee Break**
A2–A11 Hallway

7:30 am – 8:30 am **Roundtable Sessions**

Communicating with Partners During Food Safety Investigations

FSS **COM** **SEC** **SHC**

Meeting Room 1

588-832-23 • 1.0 contact hour for this session

Moderator: Kirsten Larson, MPH, Association of Public Health Laboratories

Speakers:

- Lisa Mingle, PhD, Wadsworth Center, New York Department of Health, Wadsworth Center
- Alyssa Dickey, PhD, New York State Department of Agriculture & Markets
- Bryanne Shaw, Minnesota Department of Agriculture
- Alida Sorenson, MPH, Minnesota Department of Agriculture

During food safety investigations, it is critical to have established communication pathways between partners to quickly take action. Tools from the Council to Improve Foodborne Response (CIFOR) and the Partnership for Food Protection (PFP) can assist in bolstering food safety investigations, emphasizing the importance of teamwork, coordination, and communication. Speakers will present tools and best practices for establishing robust communication pathways between food safety partners.

Is Self-testing the Future or Will We Adhere to the Past?

DDT **MLD** **MCB**

Room A4

588-833-23 • 1.0 contact hour for this session

Moderator: Megan Crumpler, PhD, Orange County (CA) Public Health Laboratory

Speakers:

- Jessica Zamora, MPH, National Coalition of STD Directors
- Susanne Crowe, MHA, Florida Bureau of Public Health Laboratories
- Ryan Karsner, MD, US Food and Drug Administration

This roundtable session will give an opportunity for partners from the National Coalition of STD Controllers, PHLs and FDA to discuss the challenges related to implementing self-collection or -testing in a PHL.

The Way Forward to Achieve National Laboratory Coordination

PAR MLD COM

Room A5

588-834-23 • 1.0 contact hour for this session

Speakers:

- Nikki Marchan, MPH, Association of Public Health Laboratories
- Sara Vetter, PhD, Minnesota Department of Health
- Ray Barishansky, DrPH, Independent Consultant
- Chris Mangal, MPH, Association of Public Health Laboratories

In the wake of the coronavirus disease (COVID-19) pandemic, one of the objectives of APHL's Strategic Map is to strengthen strategic system partnerships, including using APHL's elevated voice to strengthen laboratory coordination at a national level. During this roundtable, participants will learn more about the steps that have been taken to achieve this goal and participate in a discussion on the next steps to create a national laboratory coordination system.

Rethinking the Mid-Century Modern Laboratory for the 21st Century — Design and Planning Consideration for Constructing a New Laboratory

QMS MLD

Room A6

588-835-23 • 1.0 contact hour for this session

Moderator: Scott Hughes, PhD, New York City Public Health Laboratory

Pre-Planning: Getting Started — Budgeting to Selection of Design and Build Vendors

- Larry Seigler, PhD, D(ABCC), Houston Department of Health

Design Development: Interactive Development of Design Plans — Best Practices

- Nicolas Epie, PhD, HCLD, TS (ABB), MLS(ASCP), South Carolina Department of Health and Environmental Control
- Jeremy Corrigan, DrPH, San Diego County Public Health Laboratory

Post-Development: Construction Is Complete, What Next? Transition Planning and Verifying Building Systems

- Harmeet Kaur, PhD, HCLD (ABB), M(ASCP)^{CM} San Joaquin Public Health Services
- Gina Douville, MPA, Riverside University Health System – Public Health
- Horng-Yuan Kan, PhD, HCLD (ABB), Southern Nevada Public Health Laboratory

The roundtable discussion will be led by laboratory leadership staff who have experience in the planning and designing of a new building or extensively renovating an existing building. Areas of focus will include pre-planning processes; design process focused on schematic design concepts; and post build activities including commissioning and certification requirements and move transition planning.

Opening the Dialogue: Improving Employee Retention in Public Health Laboratories WDT MLD WFT

Room A11

588-836-23 • 1.0 contact hour for this session

Moderator: Hannah Gander, MPH, CPH, Wisconsin State Laboratory of Hygiene

Speakers:

- Lindsey Henry, MPH, CHES, Virginia Division of Consolidated Laboratory Services
- Farruk Kabir, PhD, Dallas County Health and Human Services
- Brenna McGruder, PhD, MS, Florida Bureau of Public Health Laboratories
- Royce Riessen, MBA, Wisconsin State Laboratory of Hygiene
- Sarah Sapp, PhD, Centers for Disease Control and Prevention

This session will focus on a pilot program conducted by Cohort 16 of the Emerging Leader Program describing strategies and practices to open dialogue between employees and managers, with the goal of improving job satisfaction and ultimately retention.

8:00 am – 9:30 am Coffee Break

Ballroom A Pre-function

9:00 am – 10:00 am Plenary Session

Ballroom A1

To Sequence or Not to Sequence, That is the Question NGS BIO

588-837-23 • 1.0 contact hour for this session

Moderator: Sara Vetter, PhD, Minnesota Department of Health

Speakers:

- Allen Bateman, PhD, Wisconsin State Laboratory of Hygiene
- Kelly Oakeson, PhD, Utah Public Health Laboratory

With next generation sequencing now the norm in most public health laboratories, the next question is how to best use this technology for the best public health impact. This will be a fun debate-style session with audience interaction. Two experts will go head to head and discuss the best approach for next generation sequencing for public health surveillance. One expert will represent the case that public health labs should sequence many different agents to build more robust databases while the other expert will defend a targeted approach to have less, but higher quality data.

10:00 am – 10:30 am Coffee Break

Ballroom A Pre-function *Sponsored by Waters Corporation*

How to Attract and Keep Superstar Laboratory Talent WDT MLD

Ballroom A1

588-838-23 • 1.0 contact hour for this session

Moderator: Kathleen Street, MS, PMP, Association of Public Health Laboratories

Overview of Recruitment and Retention Findings from the APHL Workforce Profiles Survey

- Kathleen Street, MS, PMP, Association of Public Health Laboratories

The First State's Guide to Retaining Top Talent: Innovative Strategies and Practical Tips

- Gregory Hovan, MBA, Delaware Department of Health and Social Services

Public Health Laboratory Employment from the Cornfields

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

Using the APHL Workforce Survey and Tools to Drive R&R Actions

- Grace Kubin, PhD, Texas Department of State Health Services

The session will cover key findings from the recently published APHL Workforce Profiles Survey, including the new PHL Salary Comparison dashboard. A panel of speakers will lead a discussion with the attendees that will focus on: a) how the data can inform planning, including best practices and innovative ideas, b) decision-making, c) taking action regarding workforce recruitment and retention, and d) partnering with Human Resources on workforce issues.

11:30 am **APHL 2023 Adjourns**

12:30 pm – 5:00 pm **Optional Tour of the California State Public Health Laboratory**

90-minute drive. Pre-registration is required.

Exhibit Hall

Network with industry peers and experts! We have a diverse exhibit hall, ready to bring you the latest in technology and equipment solutions.

- Visit with exhibitors to chat and learn of their products and services.
- Meet with poster presenters to learn the latest science, trends and practices.
- Enjoy connecting with attendees at breaks and receptions.



Exhibit Hall Schedule

Monday, May 22

3:00 pm – 6:30 pm	Hall Open
3:30 pm – 4:00 pm	Afternoon Break
5:00 pm – 6:30 pm	Welcome Reception
5:30 pm – 6:00 pm	Poster authors #1–107 available for questions

Tuesday, May 23

10:00 am – 6:30 pm	Hall Open
10:30 am – 11:00 am	Morning Break
12:00 pm – 1:30 pm	Lunch (provided in the hall)
12:30 pm – 1:00 pm	Poster authors #108–214 available for questions
2:30 pm – 3:00 pm	Afternoon Break
5:30 pm – 6:30 pm	Networking Reception

Wednesday, May 24

10:00 am – 3:30 pm	Hall Open
10:30 am – 11:00 am	Morning Break
12:00 pm – 1:30 pm	Lunch (provided in the hall)
2:30 pm – 3:30 pm	Afternoon Break
3:00 pm – 3:30 pm	Raffle Drawing in the Exhibit Hall
5:00 pm	Virtual Scavenger Hunt Drawing

Exhibit Hall

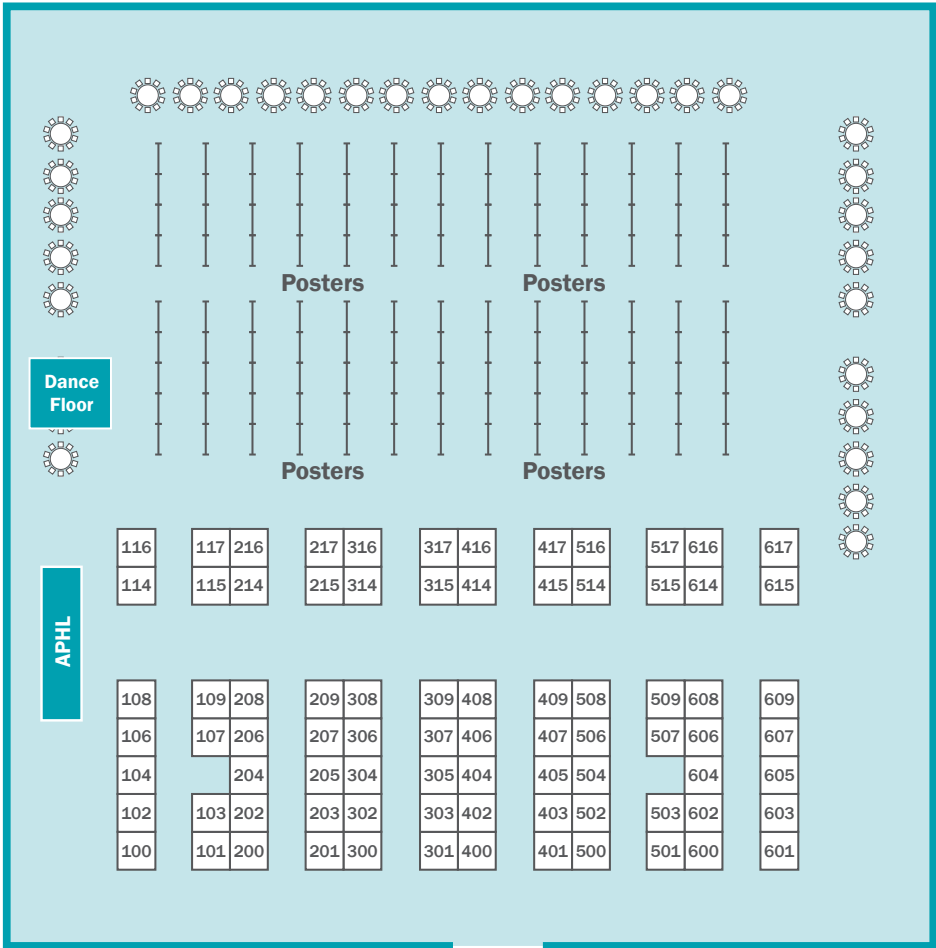
Exhibitors by Booth

Details for exhibitors are listed starting on page 49.

Exhibit Hall

Left Aisle	APHL Experience	314	Illumina
100/102	Gold Standard Diagnostics	315/317	Thermo Fisher Scientific
101	Advanced Instruments	316	National Jewish Health
103	Seegene USA	400	Cepheid
104/106	bioMerieux, Inc.	401/403	Hologic
107	HOK	402	OpenELIS Foundation
108	1928 Diagnostics	404/406	InBios International
109	LabVantage	405	STAT Courier Services, Inc.
114	Datapult	407/409	PerkinElmer
115	Ruvos	408	GT Molecular
116	Amazon Web Services	414/416	Bio-Rad Laboratories
117	LIMSABC	415/417	Roche Diagnostics
200	Quantabio	500	Streck
201	Tecan	501	BugSeq Bioinformatics
202	Standard BioTools	502	Arlington Scientific
203	Genial Compliance/ Rainbow Scientific	503	Puritan Medical Products Company
204	Acenxion Biosystems	504	Flad Architects
205	iConnect Consulting	506/508	Clear Lab
206	Oxford Nanopore Technologies	507/509	Abbott Laboratories
207	Promega	514	PacBio
208	J Michael Consulting	515	DiaSorin/Luminex
209	MRIGlobal	516	Zymo Research
214	SpeedX	517	Biotage
215	INTEGRA Biosciences	600	Sebia
216	InnovaPrep	601	ABSA International
217	University of South Florida	602	World BioHazTec
300	HDR	603	HiComp Microtech
301	Theiagen Genomics	604	Twist Bioscience
302	SCIEX	605	InductiveHealth Informatics
303	Bruker Scientific	606	ASRT
304	New England Biolabs	607	STARLIMS
305	American Public Health Association	608	Clinisys
306/308	QIAGEN	609	Guidehouse
307	Waters Corporation	614/616	CDC/DLS
309	QuidelOrtho	615	3D Medicines Biomedical Tech

Exhibit Hall Floor Plan



ENTRANCE
West Lobby, Lower Level

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- Tecan Genomics
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Exhibitors

1928 Diagnostics

Booth 108

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46.0.733.84.31.33 • www.1928diagnostics.com

1928 Diagnostics offers a cloud-based, bioinformatics analytics platform for infection control. Using genomic data, 1928 contributes to the fight against infections by identifying and characterizing pathogens to assist in tracking, controlling, and preventing outbreaks.

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Booth 615

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Abbott Laboratories

Booths 507/509

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ABSA International

Booth 601

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866.425.1385 • www.absa.org

ABSA International was founded in 1984 to promote biosafety to serve the growing needs of biosafety professionals internationally. ABSA's core purpose is to promote and expand biosafety expertise through training, laboratory accreditation, publications, networking, biosafety resources, advocacy, annual biosafety conference, and professional credentials

Acenxion Biosystems, Inc.

Booth 204

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913.638.0035 • www.acxbio.com

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Norwood, MA 02062

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Amazon Web Services, Inc.**Booth 116**

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703.547.7389 • <https://aws.amazon.com/stateandlocal/health-and-human-services/cloud-resources/#publichealth>

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American Public Health Association**Booth 305**

800 I St., NW, Washington, DC 20001

202.777.2462 • www.apha.org

APHA Press, an imprint of the American Public Health Association, provides public health practitioners, scholars and students with accessible and affordable resources of the highest quality.

Applied Science, Research and Technology, Inc.**Booth 606**

4158 Onslow Place SE, Smyrna, GA 30080

772.240.4478 • www.asrtinc.com

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801.489.8911 • www.arlingtonscientific.com

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APHL Experience

8515 Georgia Ave., Suite 700, Silver Spring, MD 20910
240.485.2745 • www.aphl.org

Connect with APHL staff and discover new resources while picking up some swag! Come visit the booth during breaks as we demonstrate new tools and programs created for you — see the schedule on page 11 of this program. We will also be interviewing attendees about their experience

bioMérieux, Inc.

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Far Left Aisle**Booth 104/106****Silver Member****Booths 414/416****Diamond Member****Booth 517****Booth 303****Corporate Colleague**



Improving public health

Clinisys is committed to providing testing, diagnostics, disease surveillance and laboratory solutions, which enable communities to become healthier.

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BugSeq Bioinformatics, Inc.

2-1831 Trafalgar St., Vancouver, BC V6K 3S1 Canada
877.334.8715 • www.bugseq.com

Booth 501
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At BugSeq, we empower public health laboratories to improve the lives of patients and communities by leveraging genomic data. BugSeq's bioinformatic analysis suite delivers unparalleled data analytics to convert sequencing data into actionable results. We provide rapid and leading accuracy algorithms, coupled with best-in-class databases to provide microorganism identification, antimicrobial resistance prediction and strain characterization, enabling broad adoption of sequencing to improve health.

Centers for Disease Control and Prevention
Division of Laboratory Systems

2400 Century Parkway NE, Atlanta, GA 30345
404.718.5729 • www.cdc.gov/labsystems

Booths 614/616

The CDC Division of Laboratory Systems aims to advance laboratory systems and improve public health, patient outcomes, and health equity.

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Booth 400
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Cepheid is a leading molecular diagnostics company that is an operating company within Danaher Corporation's. By automating highly complex and time-consuming manual procedures, the company's solutions deliver a better way for institutions of any size to perform sophisticated molecular diagnostic testing for organisms and genetic-based diseases.

Clear Labs

904 Caribbean Dr., Sunnyvale, CA 94089
408.541.4191 • www.clearlabs.com

Booths 506/508
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Clear Labs harnesses the power of next-generation sequencing to simplify complex diagnostics for clinical and applied markets. By creating a fully automated, end-to-end platform that combines DNA sequencing, robotics and bioinformatics, Clear Labs democratizes genomics. Clear Labs' turnkey platform provides insights on food-borne pathogens and infectious diseases, including SARS-CoV-2.

Clinisys

3300 E. Sunrise Dr., Tucson, AZ 85718
520.570.2000 • www.clinisys.com

Booth 608
Gold Member

Clinisys supports public health departments and laboratories. Our public health solutions enable the efficient collection, testing, analysis, and reporting of data to accelerate rapid responses, track and monitor population level changes, and inform long-term planning and health strategies. These solutions cover public health labs operating across healthcare, toxicology, water quality, environment, and infectious disease surveillance and management.



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Datapult, an APHL Company

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patina.zarcone@aphl.org

Datapult, an APHL Company, is uniquely positioned to offer test reporting, informatics consulting and more, through the AIMS cloud platform, built by APHL. Users can subscribe to Datapult's next generation sequencing suite, enabling access to bioinformatics tools and services which can be tailored to a laboratory's needs, staffing and bioinformatics resources. Datapult's electronic laboratory reporting (ELR) service, which ramped up to handle COVID-19 test results, is expanding to include all nationally notifiable diseases and reportable conditions.

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Booth 114

Booth 515
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Booth 504
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970.498.1698 • www.gtmolecular.com

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Guidehouse is a global consulting firm providing advisory, digital, and managed services to commercial and public sectors. Guidehouse Health helps providers, government agencies, life sciences companies, payers, and more solve complex industry challenges. A 4-time 2023 Best in KLAS winner, Guidehouse ranked 2022's second largest healthcare consulting firm by Modern Healthcare.

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858.205.0202 • www.hicomp.us

Booth 603

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Booths 401/403
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Booth 205

iConnect Lab Web Portal (LWP) is a secure cloud-based ETOR solution offering an intuitive, real-time interface to order tests, track progress and view results. Lab Web Portal is easy to integrate with healthcare providers, laboratory information systems and to share results with federal/state agencies. Additionally, iConnect has a vast laboratory and LIMS experience, and offers STARLIMS professional services to public health labs.

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A global genomics leader, Illumina provides comprehensive next-generation sequencing solutions to the research, clinical, and applied markets. Illumina technology is responsible for generating more than 90% of the world's sequencing data. Through collaborative innovation, Illumina is fueling groundbreaking advancements in oncology, reproductive health, genetic disease, microbiology, agriculture, forensic science, and beyond.

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307 Westlake Ave. N, #300, Seattle, WA 98109
206.326.5409 • www.inbios.com

Booths 404/406**Silver Member**

At InBios we believe an accurate diagnosis is the first step to effective treatment. Our mission has been to develop innovative, superior quality, cost-effective diagnostics for emerging infectious diseases and biothreats. All products are manufactured in the USA, and many have FDA market approvals.

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256.603.9084 • www.inductivehealth.com

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J Michael Consulting (JMC) provides health informatics consulting and support in six main areas: 1) Laboratory Informatics, 2) Data Standards & Interoperability, 3) Project and Program Management, 4) Surveillance Informatics, 5) Software Development and Integration and 6) Training. Our goal is to bring science and technology together to impact patient and population health.

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The LabVantage LIMS platform provides a Next-Generation Public Health LIMS for State and County PH labs. The platform includes an embedded electronic lab notebook, lab execution system to assure compliance in a sample life cycle, scientific data management system, ETOR portal, and comprehensive business intelligence and predictive analytics. The LabVantage LIMS can serve all lab departments with no compromise in functionality.

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Booth 117**MRIGlobal**

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816.326.5097 • www.mriglobal.com

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www.nationaljewish.org

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240 County Rd., Ipswich, MA 01938
978.380.7352 • www.neb.com

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For over 40 years, New England Biolabs, Inc. has led the industry in the discovery and production of molecular biology reagents. In addition to products for genomic research, NEB continues to expand its product offerings into areas related to PCR, gene expression, sample prep for next gen sequencing, cellular analysis, synthetic biology, and RNA analysis.

OpenELIS Foundation

5231 McIntosh Way, Egg Harbor, WI 54209
478.253.3018 • www.openelis.org

Booth 402**Silver Member**

The OpenELIS Foundation is a 501(c)(3) nonprofit corporation whose mission is to provide open source software and services to public health laboratories that will meet the demands of today's responsive public health laboratory. OpenELIS is designed to be an enterprise solution that scales to the needs of any public health laboratory, from small to large, supports multiple laboratory locations, and handles the needs of clinical, environmental, animal and newborn screening testing within a single system.

Oxford Nanopore Technologies

Gosling Building, Edmund Halley Road, Oxford, United Kingdom
212.202.1712 • www.nanoporetech.com

Booth 206
Silver Member

Oxford Nanopore Technologies' goal is to bring the widest benefits to society through enabling the analysis of anything, by anyone, anywhere. The company has developed a new generation of nanopore-based sensing technology that is currently used for real-time, accurate, accessible, and scalable analysis of DNA and RNA. The technology is used in more than 120 countries, to understand the biology of humans, plants, animals, bacteria, viruses and environments as well as to understand diseases such as cancer.

PacBio

1305 O'Brien Dr., Menlo Park, CA 94025
650.521.8000 • www.pacb.com

Booth 514
Platinum Member

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800.762.4000 • www.perkinelmer.com

Booths 407/409
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Promega

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813.482.3984 • www.promega.com

Booth 207
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Puritan Medical Products Company

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207.876.3311 • www.purtanmedproducts.com

Booth 503
Silver Member

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19300 Germantown Rd., Germantown, MD 20874
404.775.1044 • www.qiagen.com

Booths 306/308**Diamond Member**

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Quantabio

100 Cummings Center, Suite 407J, Beverly, MA 01915
617.548.8128 • www.quantabio.com

Booth 200**Silver Member**

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QuidelOrtho

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908.635.4030 • www.quidelortho.com

Booth 309**Platinum Member**

QuidelOrtho Corporation (Nasdaq: QDEL) unites the power of Quidel Corporation and Ortho Clinical Diagnostics behind a shared mission of developing and manufacturing innovative technologies that raise the performance of diagnostic testing and create better patient outcomes across the entire healthcare continuum. Ranked among the world's largest in vitro diagnostics (IVD) providers, QuidelOrtho is building on more than 120 years of collective experience and innovation. We combine industry-leading expertise in immunoassay and molecular testing with a global footprint in point-of-care settings, clinical labs and transfusion medicine to advance critical diagnostic solutions at scale.

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317.605.1509 • www.roche.com

Booths 415/417**Diamond Member**

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Ruvos

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www.ruvos.com

Booth 115**Diamond Member**

Ruvos is a national health technology leader, integrating cloud computing, interoperability, data science, and cybersecurity to build and maintain much of the country's public health digital infrastructure. Partnering with APHL, Ruvos designed and built the AIMS Platform that supports essential services, including electronic case reporting, immunization registries, and disease surveillance.

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650.393.9469 • www.sciex.com

Booth 302
Silver Member

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770.446.3707 • www.sebia.com/en-us/

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650.504.0475 • www.seegeneus.com

Booth 103
Silver Member

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www.standardbio.com

Standard BioTools™, previously known as Fluidigm, is driven by a bold vision — Unleashing tools to accelerate breakthroughs in human health. Standard BioTools provides an established portfolio of essential, standardized technologies that empower customers to scale and accelerate their life sciences research. From interrogating cell function and cancer-immune cell interactions to confidently determining new biomarkers or integrity of samples, Standard BioTools promotes the development of breakthrough medicines faster and better through the delivery of consistent, reliable, and repeatable results.

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954.439.5230 • www.starlims.com

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1745 Shea Center Dr., Suite 400, Highlands Ranch, CO 80129
720.768.4041 • www.theiagen.com

Theiagen Genomics is a global company focused on the transformation of public health and infectious disease surveillance through the innovative implementation of Next-Generation Sequencing ("NGS") and bioinformatics technologies. Our vast experience in academia, government, and industry brings a forward leaning and community-driven approach to increasing bioinformatics accessibility and usage for public health decision making. Specializing in secure, open source, cloud-based solutions for public health, Theiagen offers development, training, support, analysis, and validation services for comprehensive genomic epidemiology solutions.

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858.335.8187 • www.thermofisher.com

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Twist Bioscience

681 Gateway Blvd., South San Francisco, CA 94080
www.twistbioscience.com

Twist Bioscience is a leading and rapidly growing synthetic biology and genomics company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology. The core of the platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by "writing" DNA on a silicon chip. Twist is leveraging its unique technology to manufacture a broad range of synthetic DNA-based products, including tools for next-generation sequencing (NGS) preparation.

University of South Florida, College of Public Health

13201 Bruce B Downs Blvd., MDC 56, Tampa, FL 33612
813.974.6985 • www.publichealth.usf.edu

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Booth 201**Silver Member****Booth 301****Platinum Member****Booths 315/317****Diamond Member****Booth 604****Silver Member****Booth 217****Silver Member**

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Waters Corporation is the world's leading specialty measurement company focused on improving human health and well-being through the application of analytical technologies and industry leading scientific expertise. With our portfolio of separations and analytical science in Liquid chromatography, Gas Chromatography, and Mass Spectrometry, along with chemistry products, laboratory informatics, and professional services, we support our customers in public health protection and in assuring the safety of the world's food and water supplies.

World BioHazTec

329 Steedman Point Rd., Pasadena, MD 21122
202.247.0589 • www.worldbiohaztec.com

Booth 602

World BioHazTec is a high and maximum containment engineering, commissioning and biosafety consulting firm. Incorporated in 1995, our risk assessments are built on over 20 years of experience with BSL-2, BSL-3 and BSL-4 laboratories located throughout the world. Services include design reviews, lab planning, construction oversight, commissioning, HVAC verification, biosafety manuals, IBC consultation, training, and certification.

Zymo Research Corporation

17062 Murphy Ave., Irvine, CA 92614
949.679.1190 • www.zymoresearch.com

Booth 516
Silver Member

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Posters

Poster abstracts may be found on the conference website www.aphl.org/AC. Posters can be viewed in the exhibit hall during exhibit hall hours or on the virtual platform for the next 90 days.

**Posters that took part in the Rapid Poster Presentations sessions.*

Poster #1*

Public Health Laboratory Construction and Renovation Helpful Tips

Presenter: Lisa Wallace, West Virginia Office of Laboratory Services, lisa.m.wallace@wv.gov

Poster #2

Development of the First Automated Antibiotic Susceptibility Test System for *Neisseria Gonorrhoeae*

Presenter: Sachidevi Puttaswamy, Acenxion Biosystems, sachi@acxbio.com

Poster #3

Verification of the Qsight 225 MDTM for the Screening of X-linked Adrenoleukodystrophy (X-ALD) and Adenosine Deaminase Severe Combined Immunodeficiency (ADA-SCID) in Alabama

Presenter: Daniel Fang, Alabama Bureau of Clinical Laboratories, djfang99@gmail.com

Poster #4*

Establishment of Whole Genome Sequencing to Predict Resistant Strains of *Mycobacterium tuberculosis*

Presenter: Whitney Heard, Alabama Bureau of Clinical Laboratories, whitneyheard97@gmail.com

Poster #6

Implementing Measles Testing at the New Jersey Public Health Molecular Virology Lab

Presenter: Claire Bilyeu, Association of Public Health Laboratories, cbilyeu2018@gmail.com

Poster #7

Validation and Implementation of A Custom Second Tier Next-Generation Sequencing Assay for Improved Accuracy of Cystic Fibrosis Screening at DCLS

Presenter: Joseph Chavez, Association of Public Health Laboratories, joseph.chavez@dgs.virginia.gov

Poster #8

Comparison of Two Bioinformatics Pipelines for Antimicrobial Resistance Analysis

Presenter: Siddra Dar, Association of Public Health Laboratories, sidaries1@gmail.com

Poster #9

Wastewater Surveillance of SARS-CoV-2 in South Carolina

Presenter: Kirsti Gilmore, Association of Public Health Laboratories, gilmorkr@dhec.sc.gov

Poster #10***Knowledge Management Resources for Public Health Laboratories**

Presenter: Amanda Hughes, State Hygienic Laboratory at the University of Iowa,
amanda-hermann@uiowa.edu

Poster #11***Centralizing Electronic Laboratory Reporting (ELR) Beyond COVID-19: Challenges, Lessons, and Considerations for the Future**

Presenter: Victor Lee, Clinical Architecture, victor_lee@clinicalarchitecture.com

Poster #12***Ebola Biosafety Response: Then and Now**

Presenter: Michael Pentella, State Hygienic Laboratory at the University of Iowa,
michael-pentella@uiowa.edu

Poster #13**Piloting the ISO 35001 Standard: Cruising Towards Biorisk Management**

Presenter: Michael Marsico, Association of Public Health Laboratories, michael.marsico@aphl.org

Poster #14**Improving the Quality of Pediatric Lead Test Results Through Enhanced Specimen Collection and Analysis Practices**

Presenter: Julie Nassif, Association of Public Health Laboratories, julianne.nassif@aphl.org

Poster #15**Informatics Workforce Development and Training**

Presenter: Venessa Olanrewaju, Association of Public Health Laboratories,
venessaolanrewaju@gmail.com

Poster #16**Prediction and Characterization of Proteae Tribe Isolates Carrying Class D carbapenemase genes – Antimicrobial Resistance Laboratory Network, 2017–2021**

Presenter: Giulia Orazi, Association of Public Health Laboratories, tzn7@cdc.gov

Poster #17**Electronic Case Reporting (eCR) Data Quality Assessment and Reporting**

Presenter: Rachel Shepherd, Association of Public Health Laboratories, rachel.shepherd@aphl.org

Poster #18***ETOR: A National Solution**

Presenter: Rachel Shepherd, Association of Public Health Laboratories, rachel.shepherd@aphl.org

Poster #19**Sharing Data Across the Nation Through AIMS**

Presenter: Rachel Shepherd, Association of Public Health Laboratories, rachel.shepherd@aphl.org

Poster #20**Tracking and Comparison of SARS-CoV-2 Lineage Frequencies from Wastewater vs. Sentinel Surveillance Whole Genome Sequencing in Denver County, Colorado**

Presenter: Arianna Smith, Association of Public Health Laboratories, arianna.smith@state.co.us

Poster #21**Machine Learning — Based Typing of Staphylococcus species by the Fourier-Transform Infrared (FT-IR) Spectroscopy with IR Biotyper for Clinical Surveillance**

Presenter: Taylor Stephens, Association of Public Health Laboratories, taylorstep098@gmail.com

Poster #22**The Laboratory Response Network in Action: 2022 Preparedness and Response Activities**

Presenter: Rana Rahmat, Association of Public Health Laboratories, rana.rahmat@aphl.org

Poster #23***AWaRe Classification: Increasing Use of Access Antibiotics as a Stewardship Tool. Assessing Its Effectiveness in Decreasing Resistance Patterns — A Retrospective Study**

Presenter: Mohamed Gomaa, Association of Public Health Laboratories, spockegypt@gmail.com

Poster #24**Determining the Viability of EPA Method 200.7 as a Replacement for EPA Method 365.1 for the Analysis of Phosphorous in Water Quality Samples**

Presenter: John Chisholm, APHL-CDC, jjchisholm@yhc.edu

Poster #25**Establishment of Next Generation Sequencing for SARS-CoV-2 Utilizing Wastewater Samples from Rural Northeast Texas**

Presenter: Amna Elbadawi, APHL-CDC, amnaelbadawi18@gmail.com

Poster #26**Microbial Source Tracking for Detecting Human and Non-human Fecal Contamination in Drinking and Surface Waters**

Presenter: Dorothy Foulkes, APHL-CDC, dmwrigh1@outlook.com

Poster #27**What's in the Water? A Prototype Environmental Metagenomics Database and Pipeline for Pathogen Detection, Microbial Composition, and Antimicrobial Resistance Detection**

Presenter: Elizabeth Proctor, APHL-CDC, ued6@cdc.gov

Poster #28**Wastewater Surveillance for *Candida auris* Utilizing Digital PCR**

Presenter: Kailene Richbow Dozier, APHL-CDC, kaidozier@gmail.com

Poster #29**The Role of Circulating Influenza Viruses on B Cell Memory**

Presenter: Ved Vyas, APHL-CDC, uao4@cdc.gov

Poster #30**Optimization of Multiplex RT-PCR Assay for Detection of Respiratory Syncytial Virus, Enterovirus, Human Parechovirus, and Adenovirus Using the Panther Fusion System**

Presenter: Erika Roloff, Association of Public Health Laboratories, rolloff@gwmail.gwu.edu

Poster #31***Molecular Detection of OXA β -Lactamase Genes in Antimicrobial-Resistant Bacteria**

Presenter: Eagle Bui, Association of Public Health Laboratories, Eagle.Bui@doh.nj.gov

Poster #32**Improvements to Sensitive Pesticide Detection in Produce via Gas Chromatography-Tandem Mass Spectrometry (GC-MS/MS) Using Analyte Protectants**

Presenter: Julia Dickie, Association of Public Health Laboratories, juliamdickie@gmail.com

Poster #33**Whole Genome Sequencing and Transcriptional Analysis of *Pseudomonas aeruginosa* from Patients with Cystic Fibrosis**

Presenter: Elizabeth Knorr, Association of Public Health Laboratories, elizabeth.knorr2@gmail.com

Poster #34**Insights on the Role of the Conserved Mycobacterial Transcription Factor WhiB6 in Regulating ESX Secretion Systems**

Presenter: Emma Gordon, New York State Department of Health, ecgordon13@gmail.com

Poster #35**Validation of Illumina's Viral Surveillance Panel at NJPHEL**

Presenter: Cherrelle Barnes, Association of Public Health Laboratories, clbarnes@odu.edu

Poster #36**Reduced Ion Suppression in an Automated Extraction of Vitamins B1 and B6 from Whole Blood for LCMS Analysis**

Presenter: Kyle Dukes, Biotage, kyle.dukes@biotage.com

Poster #37**Automated Fractionation of Extractable Petroleum Hydrocarbons (EPH)**

Presenter: Michael Ebitson, Biotage, michael.ebitson@biotage.com

Poster #38**Reduced Sample Volume Extractions for US EPA Method 608.3**

Presenter: Michael Ebitson, Biotage, michael.ebitson@biotage.com

Poster #39**Evaluation of SPE Formats for Improved Extraction and Quantification of Diquat and Paraquat in Drinking Water**

Presenter: Evan Walters, Biotage, evan.walters@biotage.com

Poster #40**Comparing Methods Utilized to Test for PFAS in Aqueous Samples: EPA 537.1, EPA 533, ISO 21675**

Presenter: Evan Walters, Biotage, evan.walters@biotage.com

Poster #42***Performance Evaluation of Genomic Analysis Tools for *Shigella* and Enteroinvasive *Eschericia coli* Species Identification and Serotype Prediction**

Presenter: Linlin Li, California Department of Public Health, linlin.li@cdph.ca.gov

Poster #43**Simultaneous Analysis of Nicotine and Cannabis Metabolites in Serum by Isotope Dilution UPLC-MS/MS Method**

Presenter: Ying Li, California Department of Public Health, ying.li@cdph.ca.gov

Poster #44**Isotope Dilution UPLC-ESI-MS/MS Method for the Determination of Urinary VOC Metabolites**

Presenter: Jonathan Gallardo, California Department of Public Health, jonathan.gallardo@cdph.ca.gov

Poster #45**The Toxic Crusaders Program**

Presenters: Hector Gutierrez, Sarah Ko and Zhenhui Xie, California Department of Toxic Substances Control, hector.gutierrez@dtsc.ca.gov, sarah.ko@dtsc.ca.gov, zhenhui.xie@dtsc.ca.gov

Poster #46**Human Adenovirus Surveillance and the Impact of the COVID-19 Pandemic on Participation — United States, January 2017 – August 2022**

Presenter: Fatima Abdirizak, Centers for Disease Control and Prevention, fabdirizak@gmail.com

Poster #47**Evidence of Mpox Virus Infection from Non-Lesion Specimens Among Persons Without Characteristic Lesions or Rash — District of Columbia, August 2022**

Presenter: David Lowe, Centers for Disease Control and Prevention, nqu9@cdc.gov

Poster #48***Bordetella pertussis* Exhibits Genomic Diversity within Patients and Laboratory Culture**

Presenter: Emilie Bouda, Centers for Disease Control and Prevention, tqi7@cdc.gov

Poster #49**Optimizing Workflow for Comprehensive Immunological Assessment in Response to Influenza Vaccination and Infection**

Presenter: Chena Bryan, Centers for Disease Control and Prevention, chenabryan9@hotmail.com

Poster #50**Multi-State Evaluation of LRN Rapid BSL-3 *Bacillus anthracis* Whole Genome Sequencing for Antimicrobial Resistance Markers and Bioengineering Detection for Anthrax Preparedness**

Presenters: Blake Cherney, Centers for Disease Control and Prevention, lli0@cdc.gov and Luz Medina Cordoba, Centers for Disease Control and Prevention, gfc8@cdc.gov

Poster #51**A Nationwide Survey of Clinical Laboratories' Capabilities, Capacity, and Willingness to Support Emergency Response Surge Testing**

Presenter: Sean Courtney, Centers for Disease Control and Prevention, xcz1@cdc.gov

Poster #52**Establishing a Workflow for Analysis of the Nasal Microbial and Viral Species, and Host Transcriptome from a Single Human Nasal Swab**

Presenter: Kayla Griffith, Centers for Disease Control and Prevention, uah5@CDC.gov

Poster #53**Evaluation of Antiviral Properties of Amniotic Fluid-derived Extracellular Vesicles in Experimental Models of Influenza Virus Infection**

Presenter: Camy Guenther, Centers for Disease Control and Prevention, tzo9@cdc.gov

Poster #54**Detection of Antibody Responses Against SARS-CoV-2 in Serosurvey Participants from Distinct Periods of the COVID-19 Pandemic – New York City, New York**

Presenter: Scott Hughes, New York City Public Health Laboratory, shughes@health.nyc.gov

Poster #55***Lessons from Lesions: Trends in Specimen Submissions and Test Performance During the 2022 Mpox Outbreak in New York City**

Presenter: Scott Hughes, New York City Public Health Laboratory, shughes@health.nyc.gov

Poster #56**Improving NJHANES Recruitment Strategies**

Presenter: Emily Lax, Centers for Disease Control and Prevention, emily.lax@doh.nj.gov

Poster #57**Biotin Supplement Use in the United States, January 2017 – March 2020**

Presenter: Jacqueline Leachman, Centers for Disease Control and Prevention, tqd0@cdc.gov

Poster #58**Validation of the Roche COBAS® 5800 for Detection of Hepatitis C Virus (HCV)**

Presenter: Katie Margulieux, Centers for Disease Control and Prevention, tqe6@cdc.gov

Poster #59**Barriers and Facilitators to Use of Quality Management System Tools and Resources for Next Generation Sequencing in Public Health Laboratories**

Presenter: Ashley Marshall, Centers for Disease Control and Prevention, isg6@cdc.gov

Poster #60**Validation of MagNA Pure 24 Instruments for Downstream use of DNA in CLIA-Regulated and Non-regulated Sequencing**

Presenter: Matthew Martin, Centers for Disease Control and Prevention, tqe7@cdc.gov

Poster #61***Characterization of US Urogenital and Extragenital Meningococcal Isolates Collected Through the Enhanced Gonococcal Isolate Surveillance Project**

Presenter: GUL Mehnaz Mustafa, Centers for Disease Control and Prevention, mzv2@cdc.gov

Poster #62**Implementing FungiNet in the Antimicrobial Resistance Laboratory Network**

Presenter: Lindsay Parnell, Centers for Disease Control and Prevention, ptd1@cdc.gov

Poster #63**Tracing Anthrax-like Capsule Biosynthesis Genes in Non-*Bacillus anthracis* Species through Whole Genome Sequencing**

Presenter: Susanna Sabin, Centers for Disease Control and Prevention, qwg8@cdc.gov

Poster #64**Genome Sequence of Serodino Virus, a Novel Oliveros-like Clade E *Mammarenavirus***

Presenter: Elizabeth Shedroff, Centers for Disease Control and Prevention, ubu2@cdc.gov

Poster #65**An Evaluation of Testing Access in the Laboratory Response Network (LRN) During the First 10 Weeks of the Mpox Response, May 17 – July 31, 2022**

Presenter: Katharine Thomas, Centers for Disease Control and Prevention, twu2@cdc.gov

Poster #66**Early Detection and Diagnosis of Acute Human Immunodeficiency Virus, Type 1 Infections Using a Pooling Algorithm — Dallas, Texas**

Presenter: Maureen Ty, Centers for Disease Control and Prevention, riv9@cdc.gov

Poster #67**Exploring Viral Genetic Diversity by Deep Sequencing of Whole Genomes Following Target Enrichment: A Case Study of Universal Typing of Human Papillomavirus**

Presenter: Brian Wakeman, Centers for Disease Control and Prevention, mrq9@cdc.gov

Poster #68**Evaluating Chemical Exposures from “Non-toxic” Nail Polishes**

Presenter: Perri Callaway, CDC/NIOSH, tqa8@cdc.gov

Poster #69**Establishing a State Public Health Testing Specimen Bank for Future Analysis of De-Identified Clinical Data and use of Associated Datasets**

Presenter: Edith Mercado, New Hampshire Public Health Laboratories
edith.mercado@affiliate.dhhs.nh.gov

Poster #70**Dynamic Molecular Surveillance of SARS-CoV-2 at the Regional Innovative Public Health Laboratory in Chicago, IL**

Presenter: Hannah Barbian, Rush University, hannah.j.barbian@rush.edu

Poster #71**Genomic Surveillance of SARS-CoV-2: Comparing Data from Sequencing Clinical and Wastewater Specimens**

Presenter: Colin Korban, Chicago Department of Public Health, colin.korban@cityofchicago.org

Poster #72**Molecular Detection of Respiratory Pathogens from Congregate Spaces Using Aerosol Samplers for Public Health Actions**

Presenter: Samantha Siomko, City of Milwaukee Health Department, siomsa01@gmail.com

Poster #73***The Future Workforce of the Environmental Laboratory**

Presenter: Kathryn Wangsness, Arizona Bureau of Laboratory Services, kathryn.wangsness@azdhs.gov

Poster #74**Whole Genome Sequencing of Mpox: Assessment of Different Library Preparation Protocols**

Presenter: Alexis Alford, Colorado Department of Public Health and Environment, lexi.alford@state.co.us

Poster #75**Automating Data Processing and Data Management in a High-throughput Public Health Laboratory Using Google Collaboratory**

Presenter: Samuel Baird, Colorado Department of Public Health and Environment, sam.baird@state.co.us

Poster #76**Genomic Epidemiological Investigation of a Multi-year Carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) Outbreak at a Colorado Healthcare Facility**

Presenter: Laura Bankers, Colorado Department of Public Health and Environment, laura.bankers@state.co.us

Poster #77***PFAS Detection in Drinking Water Method Development**

Presenter: John Fennessey, Colorado Department of Public Health and Environment, john.fennessey@state.co.us

Poster #78**Genomic Epidemiological Characterization of SARS-CoV-2 Reinfection Cases, Colorado August 2020 – February 2022**

Presenter: Molly Hetherington-Rauth, Colorado Department of Public Health and Environment, molly.hetheringtonrauth@state.co.us

Poster #79**MS/MS X-ALD Cutoff Establishment and Onboarding**

Presenter: Cullan Kirwan, Colorado Department of Public Health and Environment,
kirwancullan@hotmail.com

Poster #80**Experience Working on a Pilot Project with Public Health Laboratories and the CDC from a Fellow's Perspective**

Presenter: Alexandria Lo, Colorado Department of Public Health and Environment,
ali.lo@state.co.us

Poster #81**Whole Genome Sequencing of Influenza A and B: Assessment of Different cDNA Preparation Strategies**

Presenter: Van Nguyen, Colorado Department of Public Health and Environment,
van.nguyen@state.co.us

Poster #82**Development of a COVID-19 Test Ordering System at the Colorado State Laboratory**

Presenter: Justin Nucci, Colorado Department of Public Health and Environment,
justin.nucci@state.co.us

Poster #83**Development of Unit-Specific, Electronic Training Plans for Onboarding Laboratory Staff**

Presenter: Samantha Snider, Colorado Department of Public Health and Environment,
ssnider00@gmail.com

Poster #84**Whole Genome Sequencing of Mixed Pathogen Runs to Reduce Turnaround Time and Costs per Sample**

Presenter: Daniel Mallal, Colorado Dept of Public Health and Environment,
daniel.mallal@state.co.us

Poster #85***Changes in the Correlation Between Clinical Cases and Levels of SARS-CoV-2 RNA in Colorado Wastewater**

Presenter: Carol Wilusz, Colorado State University, cwilusz@colostate.edu

Poster #86***Prevalence of *Mycoplasma genitalium* Among High-risk Persons in Dallas County**

Presenter: Margaret Gearhart, Dallas County Health and Human Services,
gearhartm33@outlook.com

Poster #87**Next Generation Sequencing Strategies for Public Health Surveillance and Outbreak Investigation of SARS-CoV-2 and Mpox Infections**

Presenter: Farruk Kabir, Dallas County Health and Human Services, farruk.kabir@dallascounty.org

Poster #88***Maximizing Lessons Learned from Past Outbreaks to Develop a Sustainable Laboratory Cross-training Program**

Presenter: Channyn Williams, DC Department of Forensic Sciences, channyn.williams@dc.gov

Poster #89**Developing an Analytical Method for Confirmatory Testing of Common Medications for Opioid Use Disorder at the District of Columbia Public Health Laboratory**

Presenter: Kaitlin King, DC Public Health Laboratory, kaitlin.bratt@gmail.com

Poster #90***Training the Next Generation of Laboratory Scientists During the Covid-19 Global Pandemic**

Presenter: Reginald Blackwell, DC Public Health Laboratory, reginald.blackwell@dc.gov

Poster #91**SARS-CoV-2 Wastewater Workflow Comparison for Upscale or Downscale Testing in the National Capital Region (NCR) Composed of the District of Columbia and Southern Maryland**

Presenter: Shauntelle Byfield, DC Public Health Laboratory, shauntelle.byfield@dc.gov

Poster #92**Antimicrobial Susceptibility Surveillance of Invasive *Candida* Species**

Presenter: Athulaprabha Murthi, DC Public Health Laboratory, amurthi@gmail.com

Poster #93**Comparison of the Accuracy of Antimicrobial Susceptibility Testing (AST) for Carbapenem Resistant Enterobacteriaceae using the Biomic V3**

Presenter: Jamal Roberts, DC Public Health Laboratory, jrob9814@gmail.com

Poster #94***Comparison of Nucleic Acid Extraction Methods for Detection of *Candida Auris* Assessed Using RT-PCR and Next Generation Sequencing**

Presenter: Leanna Sealey, DC Public Health Laboratory, leannasealey_@hotmail.com

Poster #96**The National Special Pathogen System of Care (NSPS): How Partnerships with a Care Delivery Network (CDN) can Improve Care Coordination and Outcomes in High Consequence Infectious Disease (HCID) Events**

Presenter: Peter Iwen, Nebraska Public Health Laboratory, piwen@unmc.edu

Poster #97***Impact of the Covid-19 Pandemic on Workforce Development Preferences**

Presenter: Samantha Marcellus, Florida Bureau of Laboratories, smarcellus00@gmail.com

Poster #98**Wastewater Surveillance Reports and Analysis of SARS-CoV-2 Concentrations and Variants in Hawaii**

Presenter: Maria Steadmon, Hawaii Department of Health, steadmon@hawaii.edu

Poster #99**Viral Trends: A SARS-CoV-2 Timeline with Houston Texas**

Presenter: Ryker Penn, Houston Health Department, ryker.penn@houstontx.gov

Poster #100**A Scalable Model for Metagenomics-based Surveillance for Influenza-like Illness in the Community**

Presenter: Rita Stinnett, IDbyDNA, rstinnett@idbydna.com

Poster #101**The Development of a Multiplexed Immunoassay for Multi-Stage Lyme Disease Detection**

Presenter: James Needham, InBios International, Inc., james@inbios.com

Poster # 102**Barriers to using an APHL Consortium Developed Toolkit in Jurisdiction-Branded Media Publications**

Presenter: Amanda Berlon, Indiana Department of Health, aberlon@health.in.gov

Poster #103**Using the State Food and Feed Laboratory National Curriculum Standard**

Presenter: Christopher Weiss, International Food Protection Training Institute, chris.weiss@ifpti.org

Poster #104***Pacific Rim Consortium Quality Project**

Presenters: Katie Bolin, International Responder Systems, katiebolin@internationalrespondersystems.com and Holli Dowless Kozar, California Department of Public Health, holli.dowlesskozar@cdph.gov

Poster #105**A Prevention Plan for Laboratory-acquired Burnout Modeled on the BMBL**

Presenter: Monica Akre, J Michael Consulting, makre@jmichael-consulting.com

Poster #106***Inventory and Evaluation of Laboratory Informatics Systems: A How-to Guide**

Presenter: Monica Akre, J Michael Consulting, makre@jmichael-consulting.com

Poster #107**Building a Sustainable Model for Electronic Test Orders and Results and Surveillance Reporting**

Presenter: Laurel Boyd, Oregon Public Health Laboratory, laurel.boyd@oha.oregon.gov

Poster #108**Identification of Tecovirimat Resistance-associated Mutations in Human Mpox Virus, Los Angeles County**

Presenter: Nicole Green, Los Angeles County Public Health Laboratory, nicgreen@ph.lacounty.gov

Poster #109**Outbreak of Carbapenem-producing *Pseudomonas aeruginosa* at an Ophthalmology Clinic, Los Angeles County**

Presenter: Nicole Green, Los Angeles County Public Health Laboratory, nicgreen@ph.lacounty.gov

Poster #110***Implementing Automated Extraction for High Throughput Environmental Testing**

Presenter: Maggie Wills, Maryland Department of Health, mawills1124@gmail.com

Poster #111**Wastewater-based Techniques: Optimizing Bench Protocols from Sample Concentration to dPCR in a Local Public Health Laboratory**

Presenter: Julia Zimmer, Milwaukee Health Department, jzimmer@milwaukee.gov

Poster #112***Potential Transmission Dynamics of blaKPC in an Ongoing Outbreak Response Involving Multiple Bacterial Genera**

Presenter: Jennifer Dale, Minnesota Department of Health, jennifer.dale@state.mn.us

Poster #113**"Forever Chemicals" and Us — The Affect of Per- and Polyfluoroalkyl Substances in Fish Tissue**

Presenter: Gemira Harris, Minnesota Department of Health, gemira.harris28@gmail.com

Poster #114**Creating an Inclusive Workplace: Initiating and Implementing a Diversity, Equity, and Inclusion Work Group in a Public Health Lab**

Presenter: Anna Strain, Minnesota Department of Health, anna.strain@state.mn.us

Poster #115**Survey of Abscess-Forming Pathogens Found in Cervid Retropharyngeal Lymph Nodes**

Presenter: Erica Palise, Montana Veterinary Diagnostic Laboratory, enp102799@gmail.com

Poster #116**5 Lessons Learned in Developing Training Videos for High Containment Facilities**

Presenter: Devin Boyles, MRIGlobal, dboyles158@gmail.com

Poster #117**A Landscape of Infectious Disease In Vitro Diagnostic Devices: From 2000 to Present**

Presenter: Elaine Bradford, MRIGlobal, ebradford@mriglobal.org

Poster #118**Integration of Oklahoma Public Health Laboratory (OKPHL) Testing into the Nebraska Public Health Laboratory (NPHL)**

Presenter: Arlene Paulino, Nebraska Public Health Laboratory, arlene.paulino@unmc.edu

Poster #119***Rapid Identification and Response of a *Salmonella Typhimurium* Outbreak Traced to Raw Alfalfa Sprouts, Nebraska, 2022**

Presenter: Stevie McGill, Nebraska Public Health Laboratory, stmcgill@unmc.edu

Poster #120**Time and Motion Study of a Fully Automated Isolate Whole Genome Sequencing (IWGS) Platform for Surveillance of Foodborne Pathogens**

Presenter: Emily McCutchen, Nebraska Public Health Laboratory, emily.mccutchen@unmc.edu

Poster #121***Evolution of Echinocandin Resistance in Massive Southern Nevada Outbreak**

Presenter: Lauryn Massic, Nevada State Public Health Laboratory, lmassic@unr.edu

Poster #122**Development of Screening and Sequencing Capacity for *Candida auris* Epidemiology in Nevada**

Presenter: Danielle Denise Siao, Nevada State Public Health Laboratory, danielle.siao@gmail.com

Poster #123**Whole Genome Sequencing Analysis of Multiple *C. auris* Outbreaks in Southern Nevada**

Presenter: David Hess, Nevada State Public Health Laboratory, dhess@unr.edu

Poster #124**Overcoming Variant Mutation-related Impacts on Viral Sequencing and Detection Methodologies**

Presenter: Yanxia Bei, New England Biolabs, beiy@neb.com

Poster #125**Onsite SARS-CoV-2 Sequencing Procedures Following Ongoing Workplace CLIA Surveillance**

Presenter: Betsy Young, New England Biolabs, eyoung@neb.com

Poster #126**Exploring Environmental Risk from a Rural Health Perspective: A Biomonitoring NH and New England Public Health Training Center (NEPHTC) Initiative**

Presenter: Victoria Pedersen Ciulla, BiomonitoringNH, vlpedersenciulla@plymouth.edu

Poster #127***Maximizing Efficiency in Arboviral Mosquito Surveillance Through Multiplex Polymerase Chain Reaction and Sample Pooling**

Presenter: Rebecca Lovell, New Hampshire Public Health Laboratories, rebecca.lovell@dhhs.nh.gov

Poster #128**Reference Materials for Food Safety Chemistry Testing: Importance and Considerations**

Presenter: Boone Harris, New Hampshire Public Health Laboratories,
boone.k.harris@affiliate.dhhs.nh.gov

Poster #129**NH PHL New Methods: Biomonitoring and Air Quality Assessment for a Targeted Study in Berlin, NH**

Presenter: Grace Santos, New Hampshire Public Health Laboratories,
grace.v.santos@affiliate.dhhs.nh.gov

Poster #130**Hepatitis C RNA Quantitative Stability Study – Report on Expansion of Nucleic Acid Testing for Diagnosis of Hepatitis C Infection and Treatment**

Presenter: Jessica Alexander, New Hampshire Public Health Laboratories, jessica.l.alexander@dhhs.nh.gov

Poster #131**Quantitative Analysis of Metals in Dried Blood Spots (DBS) by Inductively Coupled Plasma Mass Spectrometry**

Presenter: Hosen Arman, New Jersey Department of Health, hmarman535@gmail.com

Poster #132**Evaluating an Automated Solid Phase Extraction System to Extract Per- and Polyfluoroalkyl Substances from Delaware River Water, Following United States Environmental Protection Agency Method 1633**

Presenter: Devon Baird, New Jersey Department of Health, devon.baird@doh.nj.gov

Poster #133**Biomonitoring Results Reporting to Participants in a State-level Population Surveillance Study [NJHANES]**

Presenter: Colleen Donohoe, New Jersey Department of Health, colleendonohoe3@gmail.com

Poster #134 – Withdrawn**Poster #135****Automating Solid Phase Extraction of PFAS in Human Serum for LC-MS/MS Analysis Using a Liquid Handler**

Presenter: Zhan Quan Li, New Jersey Department of Health, zhanquan.li@doh.nj.gov

Poster #136**Data Modernization and Internships in the New Jersey Public Health and Environmental Laboratories 2019–2022**

Presenter: Satyam Patel, New Jersey Department of Health, satyam.patel@doh.nj.gov

Poster #137**Structuring a Curriculum for Public Health Laboratory Fellowships in New Jersey**

Presenter: Thomas Kirn, New Jersey Department of Health, thomas.kirn@doh.nj.gov

Poster #138***LIS Automation of a Point of Care Field Deployable Laboratory**

Presenter: Joseph Ochal, New Jersey Department of Health, joseph.ochal@doh.nj.gov

Poster #139**Rapid Implementation of Mpox Virus Whole Genome Sequencing Protocol, Using Multiple Sequencing Platforms, Allowed for Real-time Surveillance of Outbreak**

Presenter: Nicholas Palmateer, New Jersey Department of Health, nicholas.palmateer@doh.nj.gov

Poster #140**Effective Solutions for Maintaining Specimen Integrity During the Pre-analytical Testing Phase**

Presenter: Hanayo Cheung, New Jersey Department of Health, hanayo.chueng@doh.nj.gov

Poster #141***Preparing for the Next Surge: Building Resilient Inventory Management at New Jersey Public Health and Environmental Laboratories**

Presenter: Satyam Patel, New Jersey Department of Health, satyam.patel@doh.nj.gov

Poster #142**Development of Real Time PCR Assays for Detecting Tick-borne Pathogens in Support of a State-wide Tick Surveillance Program**

Presenter: Aaron Preidel, New Jersey Department of Health, aaron.preidel@doh.nj.gov

Poster #143**Implementing Influenza Sequencing for Molecular Epidemiological Surveillance of Influenza Strains Throughout the 2022–2023 Season in New Jersey**

Presenter: Hannah Schrader, New Jersey Department of Health, hannah.schrader@doh.nj.gov

Poster #144**Successful Identification and Consensus Assembly of Mpox Genome Using Direct DNA Sequencing Approach**

Presenter: Brian Schwem, New Jersey Department of Health, brian.schwem@doh.nj.gov

Poster #145**Method Optimization and Validation of Per- and Polyfluoroalkyl Substances in Human Serum Using On-line Solid Phase Extraction Ultra Pressure Liquid Chromatograph Tandem Mass Spectroscopy**

Presenter: Zhijin Xu, New Jersey Department of Health, zjxu234@yahoo.com

Poster #146**Method Validation of Per- and Polyfluoro Alkyl Substances (PFAS) in Human Plasma Using High Pressure Liquid Chromatography Mass Spectrometry (LC-MS/MS)**

Presenter: Linbin Zhong, New Jersey Department of Health, linbin.zhong@doh.nj.gov

Poster #147**Validating a PCR Test for the Detection of *Legionella* in Clinical Specimens at the New Jersey Public Health Laboratory**

Presenter: Mohammed Ellethy, New Jersey Department of Health, mohammed.ellethy@doh.nj.gov

Poster #148**Improved Quality Control Analysis of Illumina Sequencing Data**

Presenter: Jessie Bologna, New York City Dept of Health and Mental Hygiene, jbbologna@health.nyc.gov

Poster #149**Mpox Virus Lineage Assignments and Phylogeny in New York City, 2022**

Presenter: Saymon Akther, New York City Public Health Laboratory, sakther@health.nyc.gov

Poster #150**Year 1 and Year 2 Laboratory Flexible Funding Model (LFFM) Activities from the NYSAGM Food Laboratory**

Presenter: Alyssa Dickey, New York Department of Agriculture and Markets, alyssa.dickey@agriculture.ny.gov

Poster #151***Implementation of a Targeted Nanopore Sequencing Assay for Antimicrobial Resistance Detection in *Mycobacterium tuberculosis***

Presenter: Shannon Murphy, New York State Department of Health, Wadsworth Center, shgmurphy@gmail.com

Poster #152**Determining the Effects of Hemolysis on PFAS Concentrations in Blood Samples**

Presenter: Janet Lynch, New York State Health Department, Wadsworth Center, janet.lynch@health.ny.gov

Poster # 153**Laboratory Response to the Emergence of Monkeypox (Mpox) Virus in North Carolina**

Presenter: Brandon Skinner, North Carolina State Laboratory of Public Health, brandon.skinner@dhhs.nc.gov

Poster #154**Implementation and Validation of a Method for *Legionella* Detection and Enumeration Using the QIAcuity Digital Polymerase Chain Reaction Platform**

Presenter: Burabari Bornu, North Carolina State Laboratory of Public Health, burabari.bornu@dhhs.nc.gov

Poster #155***Deficiency Dilemma — A Systematic Approach for an Audit Response**

Presenter: Scott Shone, North Carolina State Laboratory of Public Health, scott.shone@dhhs.nc.gov

Poster #156**Piloting Whole-Genome Sequencing to Identify *Mycobacterium tuberculosis* Complex and Associated Antimicrobial Resistance: The North Carolina State Laboratory of Public Health's Experience**

Presenter: Al-Mounawara Yaya, North Carolina State Laboratory of Public Health,
dr.yayamouna@gmail.com

Poster #157***West Nile Virus Surveillance in Ohio**

Presenter: Shelby Anders, Ohio Department of Health, shelly.anders@odh.ohio.gov

Poster #158**Surveillance of SARS-CoV-2 in Wastewater of Ohio: Consolidation of SARS-CoV-2 Testing from Academic, Commercial and Government Labs to Ohio Department of Health Laboratory (ODHL)**

Presenter: Jyotisna Saxena, Ohio Department of Health, jyotisna.saxena@odh.ohio.gov

Poster #159**Asked on Order Entry Questions: Quality and Value of Data for Oregon COVID-19 Surveillance and Response**

Presenter: Laure Boyd, Oregon State Public Health Laboratory, laurel.boyd@oha.state.or.us

Poster #160**Maximizing MAGs from Long-read Metagenomic Assemblies: A Post-assembly Pipeline with Completeness-aware Binning**

Presenter: Trang Dahlen, Pacific Biosciences, tdahlen@pacificbiosciences.com

Poster #161***Anatoxin-a and Saxitoxin: Cyanotoxins of Increasing Frequency in Pennsylvania Freshwater Bloom Events**

Presenter: Pamela Higgins, Pennsylvania DEP Bureau of Laboratories, pahiggins@pa.gov

Poster #162**PFAS Primer: What Is PFAS? Where Are They? How Do We Test Samples for PFAS Contamination in a Public Health Lab?**

Presenter: Toby Astill, PerkinElmer, toby.astill@perkinelmer.com

Poster #163**Automated HPV DNA Extraction and Detection from Cervical, Anal, and Throat Samples**

Presenter: Emma Fischer, Promega Corporation, emma.fischer@promega.com

Poster #164**Multiplex RT-qPCR Assay of Detecting Influenza A Virus, Influenza B Virus, SARS-CoV-2, and Human Respiratory Syncytial Virus**

Presenter: Dongping Ma, Promega Corporation, dongping.ma@promega.com

Presenter: Poster #165***Optimized Methods for Antimicrobial Resistance Testing**

Presenter: Dylan Barbera, QIAGEN, dylan.barbera@qiagen.com

Poster #166**Enabling Confident Healthcare Decisions for SARS-CoV-2 Patients by Bridging Roche Antigen, Viral Load (PCR), and Antibody Tests (BRAVA): An Interim Analysis**

Presenter: Babar Javed, Roche Diagnostics, babar.javed@roche.com

Poster #167**A Response Playbook for Early Detection and Population Surveillance of New SARS-CoV-2 Variants in a Regional Public Health Laboratory**

Presenter: Hannah Barbian, Rush University Medical Center, hannah_j_barbian@rush.edu

Poster #168**Development and Optimization of *Candida auris* Surveillance Test Using a Cartridge-based Assay System**

Presenter: Sukalyani Banik, Rutgers University, sb1712@njms.rutgers.edu

Poster #169**ddPCR on Beach Water in San Diego County**

Presenter: Samantha Hallis, San Diego County Public Health Laboratory, samantha.hallis@sdcounty.ca.gov

Poster #170**Gotta Catch 'Em All: Defining Cost-Effective Variant Surveillance Through Retrospective Analysis of SARS-CoV-2 Whole Genome Sequencing**

Presenter: Greg Goodwin, South Carolina Department of Health and Environmental Control, goodwigr@dhec.sc.gov

Poster #171***Developing Laboratory-specific Risk Assessment Tools for Emerging Infectious Diseases**

Presenter: Andrea Causey, South Carolina Department of Health and Environmental Control, causeyam@dhec.sc.gov

Poster #172**COVID-19 Variant Dynamics Among Individuals with Repeat Whole Genome Sequencing Tests in South Carolina**

Presenter: Sunanda Sarkar, South Carolina Department of Health and Environmental Control, sarkars@dhec.sc.gov

Poster #173***Impact of Birthweight on TREC-Based SCID Screening**

Presenter: Cory Weaver, South Carolina DHEC Public Health Laboratory, weavercj@dhec.sc.gov

Poster #174**Validation of a Multiplex Assay for SCID/SMA Newborn Screening**

Presenter: Cory Weaver, South Carolina DHEC Public Health Laboratory, weavercj@dhec.sc.gov

Poster #175**The Impacts and Considerations for Usage of Automated Liquid Handling Robots for Sample Preparation for Next Generation Sequencing in Small Public Health Laboratories**

Presenter: Austin Grant, South Dakota Public Health Laboratory, austin.grant@state.sd.us

Poster #176**Comparative Data of Clinical Specimens from Southern Nevada Public Health Laboratory on SARS-CoV-2 Variant Detection in Clark County, Southern Nevada with Wastewater Surveillance**

Presenter: Sui Ching Phung, Southern Nevada Public Health Laboratory, phung@snhd.org

Poster #177**Wastewater-based Epidemiology for Human Influenza A and B, Parainfluenza, Metapneumovirus, RSV, Seasonal Coronaviruses, Rhinovirus, Norovirus, Mpox, and SARS-CoV-2**

Presenter: Alexandria Boehm, Stanford University, aboehm@stanford.edu

Poster #178**An Introduction to the Iowa Biomonitoring Program at the State Hygienic Laboratory at the University of Iowa**

Presenter: Michael Schueller, State Hygienic Laboratory at the University of Iowa, michael-schueller@uiowa.edu

Poster #179**Improving Public Health Laboratory Testing Processes in Iowa**

Presenter: Derrick Shostrom, State Hygienic Laboratory at the University of Iowa, derrick-shostrom@uiowa.edu

Poster #180***A Panther Fusion Clade II Mpox Lab Developed PCR Assay – Optimization Using the Open Access System**

Presenter: Rebecca Villa, State Hygienic Laboratory at the University of Iowa, rvilla@uiowa.edu

Poster #181**Going With the Flow: Implementing a COVID-19 Wastewater Surveillance Program in a Small State**

Presenter: Christopher Benton, New Hampshire Public Health Laboratories, christopher.benton@dhhs.nh.gov

Poster #182**qPCR Assay for Identification of OXA-235 Variants Associated with Carbapenem-resistance in Enterobacteriaceae**

Presenter: Stephanie Cossette, Streck, scossette@streck.com

Poster #183**The Functional Role of Naturally Evolved Gene SNPs in Clinical Strains of *Pseudomonas aeruginosa***

Presenter: Kayla Simanek, SUNY Albany Biomedical Sciences, ksimanek@albany.edu

Poster #184***Pilot Program of Tennessee Department of Health — Private Well Water and Emergency Response Test Kit Program**

Presenter: Patrick Leathers, Tennessee Department of Health: Laboratory Services, patrick.leathers@tn.gov

Poster #185**Navigating Cross-sector Collaborations for Advanced Molecular Detection During the COVID-19 Pandemic: Applications, Challenges, Opportunities**

Presenter: Magdalena Dorvil-Joanem, Tennessee Department of Health: Laboratory Services, magdalena.dorvil-joanem@tn.gov

Poster #186**Validation and Implementation of Sanger Sequencing for *Cryptosporidium* Subtyping in the State of Texas**

Presenter: Joyce Cen, Texas Department of State Health Services, joyce.cen@dshs.texas.gov

Poster #187**Distribution of Carbapenem-Resistance Mechanisms Among Enterobacterales, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* in Texas, 2017–2022**

Presenter: Deanne Gehlbach, Texas Department of State Health Services, deanne.gehlbach@dshs.texas.gov

Poster #188**Validation and Implementation of Antimicrobial Susceptibility Testing to Monitor Trends in Antimicrobial Resistant *Neisseria gonorrhoeae* in the State of Texas**

Presenter: Naomi Niyah, Texas Department of State Health Services, Naomi.Niyah@dshs.texas.gov

Poster #189**Next Generation Sequencing at Texas Department of State Health Services**

Presenter: Yan Sun, Texas Department of State Health Services, yan.sun@dshs.texas.gov

Poster #190**The Road to the Measurement of PFAS**

Presenter: Ashley Burditt, Texas Department of State Human Health Services, ashley.burditt@hotmail.com

Poster #191***Development of *Candida auris* Surveillance RT-PCR Test in a Prison Hospital Setting**

Presenter: Filipe Cerqueira, The University of Texas Medical Branch, fmcerque@utmb.edu

Poster #192**TheiaEuk: Bioinformatics Workflow for Species-Agnostic Characterization of Fungal Pathogens**

Presenter: Frank Ambrosio, Theiagen Genomics, frank.ambrosio@theiagen.com

Poster #193**NIH/RADx Collaboration for Pandemic Surveillance Using the TaqMan SARS-CoV-2 Mutation Research Panel**

Presenter: Kathleen Hayashibara, Thermo Fisher Scientific,
kathleen.hayashibara@thermofisher.com

Poster #194**Simultaneous Detection of Respiratory Infectious Diseases Using Immunoprecipitation and Liquid Chromatography-Tandem Mass Spectrometry**

Presenter: Yvonne Song, Thermo Fisher Scientific, yvonne.song@thermofisher.com

Poster #195**Including Peptide Enrichment in a Mass Spectrometry-based Workflow for the Absolute Quantitation of SARS-CoV-2**

Presenter: Richard Gibson, Thermo Fisher Scientific, richard.gibson@thermofisher.com

Poster #196***Development and Implementation of a Canine Infectious Respiratory Disease Panel (CIRD)**

Presenter: Teddy Spikes, Tifton Veterinary Diagnostic and Investigational Laboratory,
trs53790@uga.edu

Poster #197**Rapid, Point-of-Care Testing Using Surface-enhanced Raman Spectroscopy and Deep Learning**

Presenter: Teddy Spikes, Tifton Veterinary Diagnostic and Investigational Laboratory,
trs53790@uga.edu

Poster #198**Enhancing Swine Diagnostics for the Detection and Differentiation of ASF and CSF from Other Septicemic Diseases: Development of Novel Multiplex High Throughput Taqman qPCR Panels and Point-of-care Isothermal Diagnostic Platforms**

Presenter: Carol Hollis, Tifton Veterinary Diagnostic and Investigational Laboratory,
cjea72010@gmail.com

Poster #199**This Test is Outta Here!**

Presenter: Greg Hovan, Delaware Public Health Laboratory, gregory.hovan@delaware.gov

Poster #200**Lessons Learned from Two Years of SARS-CoV-2 Wastewater Surveillance: Comparison of Viral Concentration, Extraction and Quantification Methods**

Presenter: Dagmara Antkiewicz, University of Wisconsin, Madison, dksieprawska@wisc.edu

Poster #201***Can Commercially Available Field Tests Reliably Detect Trace Methamphetamine?**

Presenter: William Naviaux, University of Wisconsin, Madison, willnavx@gmail.com

Poster #202**Development of Novel Methods for Total Organic Fluorine Assessments in Environmental and Clinical Matrices**

Presenter: Martin Shafer, University of Wisconsin, Madison, mmschafer@wisc.edu

Poster #203**Developing Resources to Facilitate Expanded Application of Non-Targeted Analysis Methods**

Presenter: James McCord, US Environmental Protection Agency, jmccord314@gmail.com

Poster #204**Inclusive Leadership**

Presenter: Nandhu Balakrishnan, Georgia Public Health Laboratory, nandhu.balakrishnan@dph.ga.gov

Poster #205**Evaluation of Two Matrix Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry Methods for Filamentous Fungal Identification**

Presenter: Kathleen Milloy, Virginia Division of Consolidated Laboratory Services, kathleen.milloy@dgs.virginia.gov

Poster #206**Evaluation and Validation of Quantitative PCR for *Listeria monocytogenes* in Foods**

Presenter: Faith Weber, Virginia Division of Consolidated Laboratory Services, faithweber24@gmail.com

Poster #207**Validation of High-Throughput Screen for Carbapenemase Gene Variants**

Presenter: Nicholas Olivarez, Washington Public Health Laboratories, nicholas.olivarez@doh.wa.gov

Poster #208***Improving Visibility of Quality Indicators Through Automated Dashboarding: An Effective Way to Enhance Laboratory Quality Management System**

Presenter: Nevada Ruehlen, Washington Public Health Laboratories, nevada.ruehlen@doh.wa.gov

Poster #209**Pathogen and Antimicrobial Resistance Detection in Wastewater Using Hybrid Capture Enrichment Provides a Method for Tracking Emerging Infectious Diseases and Antimicrobial Resistance Genes**

Presenter: Kayley Janssen, Wisconsin State Laboratory of Hygiene, kayley.janssen@slh.wisc.edu

Poster #210**Evaluating Whole-Genome Sequencing as an Approach for Antimicrobial Susceptibility Testing with AREScloud**

Presenter: Christopher Jossart, Wisconsin State Laboratory of Hygiene, cjjossart@gmail.com

Poster #211**Monitoring COVID-19 Variants in Wisconsin Using SARS-CoV-2 Whole-Genome Sequencing in Wastewater**

Presenter: Adelaide Roguet, Wisconsin State Laboratory of Hygiene, adelaide.roguet@slh.wisc.edu

Poster #212**Validation of the bioMérieux EMAG® Nucleic Acid Extraction Instrument for Non-variola Orthopox Real-time PCR**

Presenter: Sylvia Veleker, Wisconsin State Laboratory of Hygiene, sveleker93@gmail.com

Poster #213 – Withdrawn**Poster #214 – Withdrawn**

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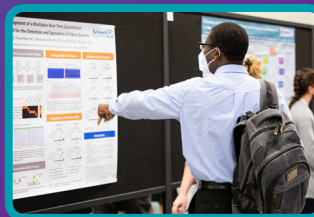
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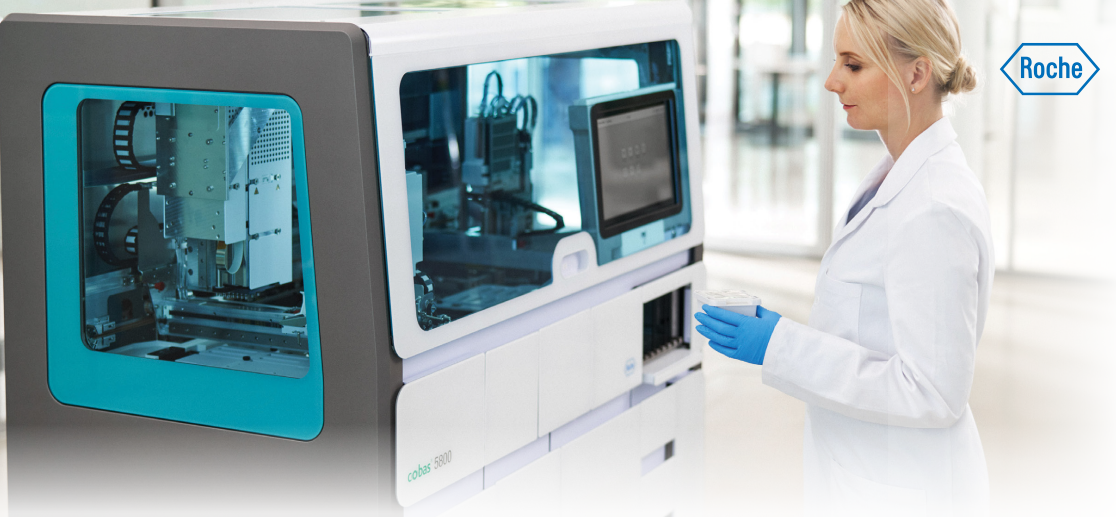


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