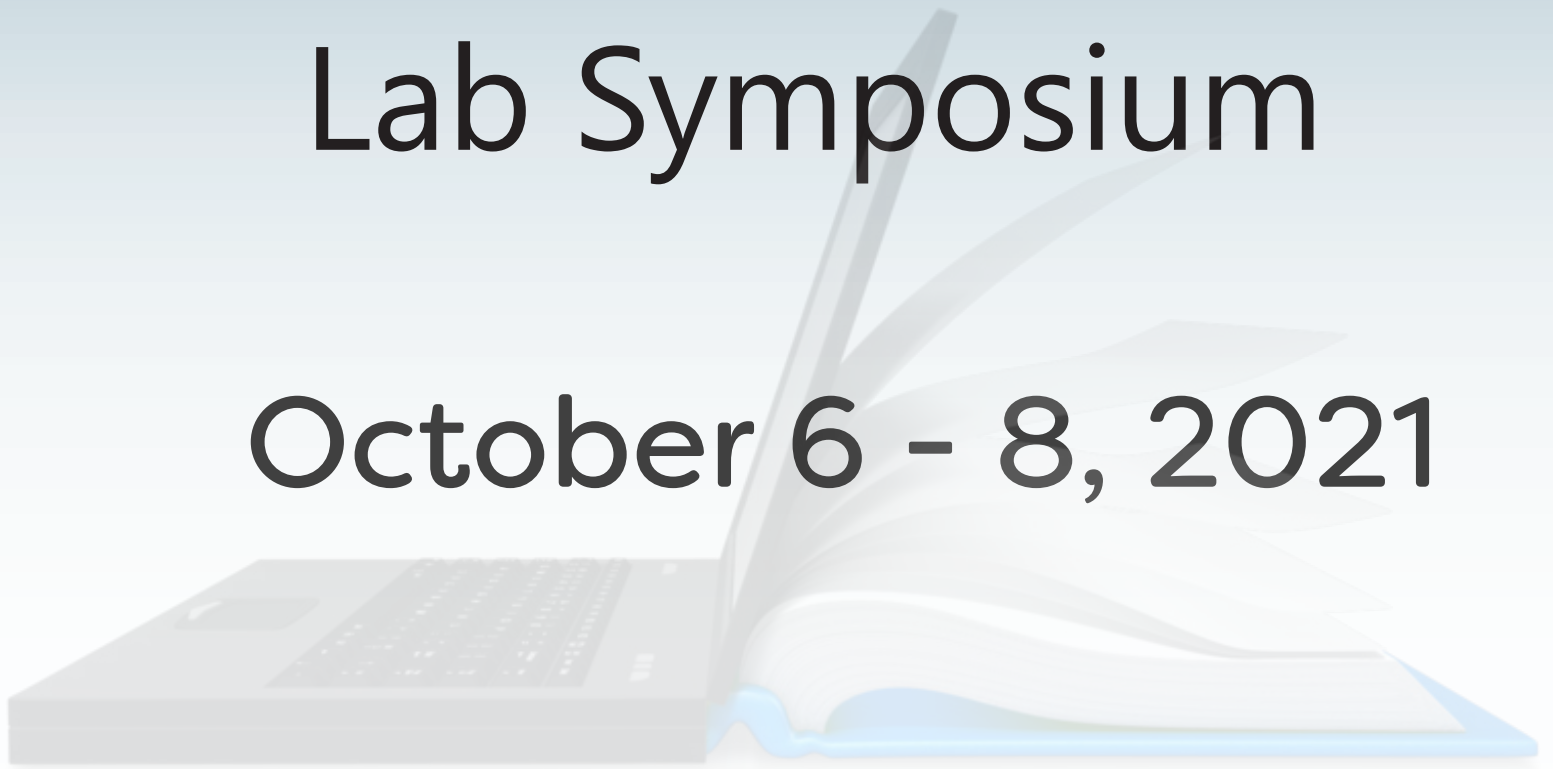


NWMLS 2021

2021 Virtual Northwest Medical Lab Symposium

October 6 - 8, 2021



Vendor Presentations

Educational Sessions

Chat with Attendees

2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING

Program Grid

Time	Wednesday, Oct 6	Thursday, Oct 7	Friday, Oct 8
8:00 - 9:00 am	Drug Abuse Testing for the Hidden Epidemic: The Opioid Crisis	Using Stratified Case Studies for Blood Bank Competency	Prognostic Laboratory Data for SARS-CoV2 Infections
9:30 - 10:30 am	<i>Industry Partner Presentations</i> AUDIT MicroControls Roche Diagnostics InnaK Diagnostics	The Importance of Accurate Point-of-Care Glucose Measurement in COVID-19 and Other Critically Ill Patients	Utilizing Immunoassay Solutions to Battle & Understand the COVID-19 Pandemic
11:00 am - 12:00 pm	Anticoagulant Monitoring: Using the Anti-Xa Assay to Improve Patient Care	<i>Industry Partner Presentations</i> Roche Diagnostics Werfen - Instrumentation Laboratory ARKRAY Molecular Lab Partners	Dysbiosis: The Next Stage of Clinical Microbiology
12:00 - 1:00 pm	Break	Break	Break
1:00 - 2:00 pm	Synthetic Microbiology: Is the Future of Infection Carbon-Based?	The Relentless Spread of a Global Fungal Superbug	Bioethics: Yours or the Hospital
2:30 - 3:30 pm	The Active Role of Laboratory Medicine in Improving Patient Care at the Point of Care	<i>Industry Partner Presentations</i> Applied BioCode, Inc. DiaSorin Molecular Sight Diagnostics, Inc.	<i>Industry Partner Presentations</i> Werfen bioMerieux, Inc. Qiagen
4:00 - 5:00 pm	5 Genomic Sequencing of SARS-CoV-2, Variants Determination and Evolution of Detection Methods in the World of COVID-19.	Video Tips for the Faint of Heart	Updates and Resources for Laboratory Biosafety and Packing / Shipping Infectious Substances

Presented by the Washington and Oregon
ASCLS and AMT Societies

2021 NORTHWEST MEDICAL LAB SYMPOSIUM

VIRTUAL MEETING

SESSIONS | WEDNESDAY, OCTOBER 6, 2021

8:00 - 9:00 AM Session 1 1 Contact Hour

Drug Abuse Testing for the Hidden Epidemic: The Opioid Crisis

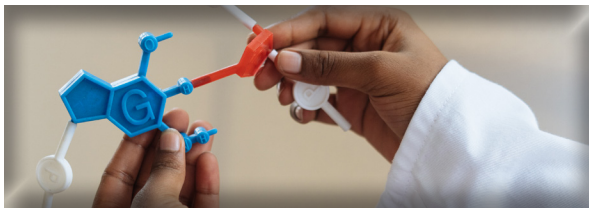
- **Steven A. Noel, PhD, DAABCC, MT(ASCP)**
Siemens Healthineers

The root of the current opioid crisis can be traced to pain management having serious impact on various aspects of society. Lack of training for appropriate utility and dispensing of pain medication and other epidemiological, genetic, and epigenetic factors have propagated opioid misuse and opioid use disorder. The magnitude of opioid-related overdoses and death has become epidemic. To further intensify the crisis, the COVID-19 pandemic promotes opioid misuse and masks to some extent our need to address it.

In this session, you will learn about the three waves of the opioid crisis, the epidemiological factors that influence it, the impact of the COVID-19 pandemic, and potential resolutions to tame the opioid crisis. You will also learn about the need for comprehensive opioid drug abuse testing with attention to specific drugs and drug classes: Oxycodone, Heroin, Fentanyl, Tramadol.

- ⇒ Describe the current status of the Opioid Crisis and how it came to epidemic proportions.
- ⇒ Describe the epidemiology of the crisis: The impact of pain management, prescription drug dispensing, and licit and illicit drug proliferation and COVID-19.
- ⇒ Discuss the need for comprehensive drug testing and opioid-related drug abuse testing.
- ⇒ Gain insight into encouraging approaches to tame the opioid crisis and improve public health outcomes.

Sponsor: Siemens Healthineers



Industry Partner Presentations

9:30 - 10:30 am

Each company will give a presentation about their current products or services.

AUDIT MicroControls, Inc.

Roche Diagnostics

InnaK Diagnostics

11:00 am - 12:00 pm Session 2 1 Contact Hour

Anticoagulant monitoring: Using the Anti-Xa Assay to Improve Patient Care

- **Paul Riley, PhD, MBA**

Diagnostica Stago, Inc. Parsippany, NJ

In the US, approximately 12 million patients either receive therapeutic doses or are exposed to unfractionated heparin (UFH) on an annual basis. For hospitalized patients, patients receiving therapeutic doses of UFH require monitoring by either the activated partial thromboplastin time (aPTT) or the chromogenic anti-Xa assay. In addition to UFH, anti-Xa assays are useful for monitoring patients receiving low molecular weight heparin (LMWH) along with the direct oral anticoagulants (DOACs) apixaban, rivaroxaban, and edoxaban. Our presentation will discuss the challenges inherent to use of aPTT for UFH monitoring, and the benefits of anti-Xa monitoring for UFH, LMWH, and DOACs.

- ⇒ Discuss anticoagulation practices commonly used in clinical settings and situations in which UFH, LMWH, or DOACs could be selected by clinicians.
- ⇒ Present differences between aPTT and anti-Xa monitoring for UFH.
- ⇒ Explain case studies highlighting benefits of anti-Xa monitoring for UFH and DOACs.

Sponsor: Diagnostica Stago, Inc.

2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING SESSIONS | WEDNESDAY, OCTOBER 6, 2021

1:00 - 2:00 PM Session 3 1 Contact Hour

Synthetic Microbiology: Is the Future of Infection Carbon-Based?

- **James T. Griffith, PhD, CLS (NCA)**
University of Massachusetts Dartmouth, MA

Many advances in molecular techniques have advanced society through medicine and biology. Synthetic life is now at our doorstep and indeed is already making its presence felt. This session will look at how we got to this point as well as the very nature of synthetic life and what the next steps will be. Implications for clinical microbiology will be speculated.

- ⇒ Describe the historical path leading to the existence of synthetic microorganisms.
- ⇒ Describe the molecular biology/engineering techniques that make synthetic life possible.
- ⇒ Discuss the current understanding of consequences relating to availability of synthetic microorganisms in the general environment as well as those of not advancing this emerging technology.



2:30 - 3:30 PM Session 4 1 Contact Hour

The Active Role of Laboratory Medicine in Improving Patient Care at the Point of Care

- **Norman Moore, PhD**
Abbott Rapid Diagnostics

Laboratory medicine becomes increasingly urgent in time-sensitive care areas where patients and clinician benefit from rapid results. Join this enlightening laboratory perspective on point of care testing for upper respiratory illnesses. Dr. Kenneth Blick, a world-renowned laboratory expert, will keep you entertained while being educated on collaborative laboratory testing strategies.

- ⇒ Describe important respiratory challenges in time-sensitive care areas.
- ⇒ Discuss laboratory and clinical collaboration in improving patient care.
- ⇒ Review rapid antigen and molecular respiratory testing solutions for upper respiratory illnesses
- ⇒ Assess clinical utility and the essential role of the laboratory in integrating rapid testing.

Sponsor: Abbott Rapid Diagnostics

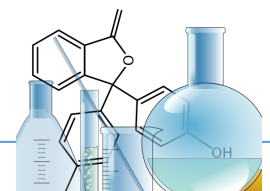
4:00 - 5:00 pm Session 5 1 Contact Hour

Genomic Sequencing of SARS-CoV-2, Variants Determination and Evolution of Detection Methods in the World of COVID-19

- **Eugene Yeboah MSc**
Oregon State Public Health Laboratory

We will discuss the sequencing of SARS-CoV-2, variants determination and evolution of detection methods. Included will be the linkages between mutations and variants, as well as how tests are developed.

- ⇒ Describe the linkages between mutations and variants of SARS-CoV-2.
- ⇒ Outline how tests are developed for SARS-CoV-2 sequencing.
- ⇒ List key concepts in gene analysis and tools for aspects of whole genome sequencing.



Sponsor: Oregon Health Authority

2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING SESSIONS | THURSDAY, OCTOBER 7, 2021

8:00 - 9:00 AM Session 6 1 Contact Hour

Using Stratified Case Studies for Blood Bank Competency

- Grace Leu-Burke MSCLS MT(ASCP)

University of Alaska Anchorage Anchorage, AK

Working with new graduates or training laboratory professionals for blood bank rotation a supervisor may find the technologist is anxious on their ability to accurately respond, especially when a clinical situation changes from routine surgery to a massive transfusion. Critical thinking is imperative in acute care transfusion medicine, yet it can be difficult to teach and assess. By scaffolding blood bank case studies to evolve as they would naturally occur in the clinical lab, the supervisor can review and guide the technologist's decision making in real time situations and provide feedback discussion on "What to do next."

- ⇒ Develop blood bank case studies that promote decision making in real time with outcomes based on patient status.
- ⇒ Assess critical thinking skills in complex crossmatch, evaluating employee confidence in antibody identification.
- ⇒ Improve training of multi-tasking skills in new blood bankers by presenting case studies within a fluid clinical situation.



9:30 - 10:30 AM Session 7 1 Contact Hour

The Importance of Accurate Point-of-Care Glucose Measurement in COVID-19 and Other Critically Ill Patients

- Dennis Begos, MD, FACS

Nova Biomedical Waltham, MA

Bedside glucose measurement is an essential part of caring for critically ill patients, since it allows for rapid clinical decision making. Unfortunately there are many interferences from drugs, to intrinsic patient conditions that can cause inaccurate glucose determinations. Many of these can cause factitious hyperglycemia (a falsely elevated glucose) leading to potential inappropriate insulin administration and potential complications, even death. This talk will focus on potential interfering agents, and devices which are vulnerable to incorrect readings.

- ⇒ Describe the mechanism by which point-of-care glucose meters work.
- ⇒ Identify common interferences in glucose measurement.
- ⇒ Discuss different blood glucose monitoring systems and how they can correct for interferences.
- ⇒ Discuss the importance of accurate glucose measurement in critically ill patients.

Sponsor: Nova Biomedical

Industry Partner Presentations

11:00 am - 12:00 pm

Each company will give a presentation about their current products or services.

Roche Diagnostics

Werfen – Instrumentation Laboratory

ARKRAY

Molecular Lab Partners

2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING SESSIONS | THURSDAY, OCTOBER 7, 2021

1:00 - 2:00 PM Session 8

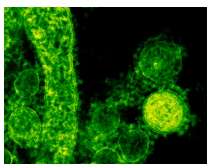
1.Contact Hour

The Relentless Spread of a Global Fungal Superbug

- Sarah Elliott, PhD
DiaSorin Molecular

Candida auris is an emerging fungal pathogen first described in 2009 that has since spread around the globe. *C. auris* is a significant healthcare concern due to a combination of properties intrinsic to the pathogen and the limitations of available laboratory testing methods. *C. auris* is often resistant to multiple antifungal drugs used to treat Candida infections, and alarmingly some isolates are resistant to all available therapeutics, making treatment of these infections very difficult. Further, *C. auris* is known to cause outbreaks in healthcare facilities, and the fungus is easily spread once introduced, readily colonizing both patients and environmental surfaces alike. Those living in long-term care facilities and hospitalized patients are at the highest risk for developing invasive infection once colonized with *C. auris*. Moreover, it is challenging to identify *C. auris* using conventional laboratory techniques. This pathogen can be misidentified without utilizing specialized methods, leading to misdiagnosis and inappropriate patient management. Rapid and accurate detection of *C. auris* is critical for both initiating proper treatment and implementing infection control measures. This talk will focus on the microbiology background, epidemiology, and laboratory testing methodologies available to detect *C. auris*.

- ⇒ Describe the biology, virulence factors, and antifungal resistance mechanisms of the fungal pathogen *Candida auris*.
- ⇒ Summarize the transmission, epidemiology, colonization, and disease manifestations of *Candida auris*.
- ⇒ Identify the laboratory methods used to detect *Candida auris* colonization.



Sponsor: DiaSorin Molecular

Company Presentations

2:30 - 3:30 pm

Each company will give a presentation about their current products or services.

Applied BioCode, Inc.

DiaSorin Molecular

Sight Diagnostics, Inc

4:00 - 5:00 PM

Session 9

1 Contact Hour

Video Tips for the Faint of Heart

- Ginger Weeden MLS(ASCP)

Set In Motion Marketing & Media Bend, OR

The pandemic put many of us on camera with Zoom and other video conferencing platforms before we were really prepared to be at our best. But the need for video conferencing is not going away, and there is still time to learn how to look and sound like the professionals we truly are.

Our laptop cameras and webcams weren't designed to finesse either our personal appearance or our voice quality. Thus, we need to learn what pieces of inexpensive equipment we can have at hand to produce a professional look on camera.

- ⇒ Describe how to select an inexpensive portable light to help you look your best on camera.
- ⇒ Describe how to modify your camera set-up in order to get the best, most natural angle.
- ⇒ Select an inexpensive microphone to improve the sound quality of your voice.



2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING SESSIONS | FRIDAY, OCTOBER 8, 2021

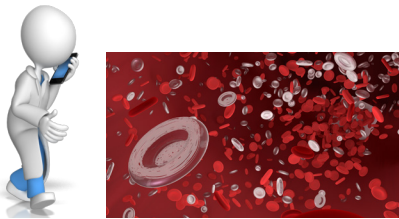
8:00 - 9:00 AM Session 10 1 Contact Hour

Prognostic Laboratory Data for SARS-CoV2 Infections

- **Susan J. Leclair, PhD, CLS(NCA)**
University of Massachusetts Dartmouth, MA

In the past year, laboratory professionals have been trying to find ways to help physicians diagnose and treat patients with SARS-CoV-2. This presentation will cover what we could have used to better treat our patients and help our laboratories work more smoothly. What we know today suggests models of how to cope with tomorrow's epidemic.

- ⇒ Recognize the evolving state of data in epidemic situations.
- ⇒ Develop a laboratory-specific test chart for health care provider use during disaster/pandemic situations.
- ⇒ Describe the need to communicate the correct use of the laboratory to others.



9:30 - 10:30 AM Session 11 1 Contact Hour

Utilizing Immunoassay Solutions to Battle & Understand the COVID-19 Pandemic

- **Jared Jaeger, PhD**
Ortho Clinical Diagnostics Springfield, MO

This session will look at immunoassay testing in the laboratory to help clinicians, laboratorians, and researchers manage patients and understand the progression and impact of the COVID-19 pandemic. Both antibody and antigen testing options will be discussed to show why assay design is important, and how the various assays can be utilized to better empower decisions made by health care providers and researchers. These lab tools will help play a valuable role in managing patient care, understanding the pandemic spread, and learning how the immune response can be measured to understand natural infection response and response to vaccines.

- ⇒ Identify various immunoassays used in COVID-19 testing.
- ⇒ Describe how antibody and antigen assays target various viral regions.
- ⇒ Discuss how immunoassay test results impact patient care and help researchers gain insight to the SARS-CoV-2 virus.

Sponsor: Ortho Clinical Diagnostics

11:00 am - 12:00 pm Session 12 1 Contact Hour

Dysbiosis: The Next Stage of Clinical Microbiology

- **James T. Griffith, PhD, CLS (NCA)**
University of Massachusetts Dartmouth, MA

We live in a bacterial world where each of us is really a "supra-organism". The microbial portion of this supra-organism is extremely big, complex, and varied. Phylotypes (learned from metagenomics) have taught us that rapid changes can happen to the microbiome of each of us fairly quickly. This may be the next area of exploration for Clinical Microbiology.

- ⇒ Describe the forces that have led to our current microbiota.
- ⇒ Discuss our current understanding of dysbiosis in historical context.
- ⇒ Describe the general process of Dysbiosis.



2021 NORTHWEST MEDICAL LAB SYMPOSIUM VIRTUAL MEETING SESSIONS | FRIDAY, OCTOBER 8, 2021

1:00 - 2:00 PM Session 13 1 Contact Hour

Bioethics: Yours or the Hospital

- **Susan J. Leclair, PhD, CLS (NCA)**
University of Massachusetts Dartmouth, MA

“Ethics don’t count unless they hurt” is a common assumption in ethical theory development. What are you willing to give up? Starting with a background of the major bioethical theories, discussion will center around cases involving decision making as a citizen, family member, or professional in an acute care setting.

- ⇒ Describe the contending ethical theories and give examples of each.
- ⇒ Recognize an ethical situation when you find yourself in one.
- ⇒ Justify the choices with the theories in given situations.



Company Presentations

2:30 - 3:30 pm

Each company will give a presentation about their current products or services.

Werfen

bioMerieux, Inc.

Qiagen



4:00 - 5:00 pm

Session 14

1 Contact Hour

Updates and Resources for Laboratory Biosafety and Packing / Shipping Infectious Substances

- **Rob Nickla RBP, QLS, M(ASCP)**
Oregon State Public Health Laboratory Hillsboro, OR

This session will provide updates for essential laboratory biosafety practices and highlight key biosafety resources. This session will also cover new resources for shipping infectious substances.

- ⇒ Identify biosafety resources and practices for laboratories and identify requirements and resources for shipping infectious substances.

Sponsor: Oregon Health Authority

Registration Form

2021 Northwest Medical Lab Symposium
October 6 - 8, 2021
Virtual Meeting

Online registration and credit card payment is available at
<http://www.asclswa.org/NWMLS.html>
or
For mail registration send this form with a check payable to
Northwest Medical Laboratory Symposium.

First Name _____ Last Name _____
Address _____
City/State/Zip _____
Phone _____
Institution _____
City/State _____
Email Address _____

Category	Fee	Total Fee
ASCLS/AMT Professional/Technical	\$60.00	\$
ASCLS #	AMT #	
Non-Member	\$80.00	\$
Student	\$10.00	\$
Total Fee		\$

**Your fee covers all three days of the Northwest
Medical Lab Symposium.**

**The live sessions will be recorded and available to
registered attendees for 30 days after the meeting.**

To Register by Mail:

Complete the registration form and mail the registration form and check payable to
Northwest Medical Laboratory Symposium to:

2021 Northwest Medical Lab Symposium
Brenda Kochis
44 West 26th Avenue
Spokane, WA 99203-1818

If questions, contact Brenda Kochis:

Email preferred: BrenKoch@comcast.net

Phone (before 8 pm) 509-939-8445 (leave message).

To Register Online:

Go to <http://www.asclswa.org/NWMLS.html> Click on "Online Registration" to go to the
online form. Credit cards can be used to pay for registration.

Registration Deadline: **October 4, 2021**

This deadline is to allow us to provide the information for access to the Virtual NWMLS. Registrations are
still accepted after this date.