2022

Joint Spring Seminar

Virtual

April 20 - 22, 2022



Program Grid

Proyram Griu					
Time	Wednesday, Apr 20	Thursday, Apr 21	Friday, April 22		
8:00 - 9:00 am	Mental Health and The Unique Demand of a Pandemic	Impact of Personalized Medicine on Higher Education	COVID-19 Testing at the Point of Care: A New Platform for High Sensitivity Antigen and Antibody Testing		
9:30 - 10:30 am	Maximizing Diagnostic Yield From A Low Volume Sample On A Multifunctional Digital Microfluidics Platform	Resiliency: Bouncing Forward	Sharing Best Practices: Urine Automation Journey		
11:00 am - 12:00 pm	Using Digital Cell Imaging to Standardize Differential Morphology to Improve Turnaround Time and Patient Care with Esoteric Case Studies.	Hot Topics in Rapid Testing For COVID-19 and Influenza	Preceptor Training: Presented by Oregon Institute of Technology		
12:00 - 1:00 pm	Break	Break	Break		
1:00 - 2:00 pm	Hematology M+Ms: Morphology and Mystery (Case Studies)	Onboard or Overboard? Providing a Life Raft for New Leaders to Keep Them from Sinking	Lyme Disease and COVID-19: An Epidemic Within a Pandemic		
2:30 - 3:30 pm	Social Determinants of Health & Their Influence on Equity in Laboratory Testing	The Enhanced Liver Fibrosis (ELFTM) Test and the Unmet Challenges in the NASH Epidemic	Calibration Verification/Linearity: Guidelines & Regulations		
4:00 - 5:00 pm	bioArt Rules and Vitek Configurations	Quality Improvement Tools to Improve Patient Safety: Root Cause Analysis	Perplexed by Prenatal Patient? Prenatal/ Perinatal Testing		

Presented by the Alaska, Oregon, and Washington ASCLS State Societies



2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | WEDNESDAY, APRIL 20, 2022

8:00 - 9:00 AM Session 1

1 Contact Hour

Mental Health and The Unique Demand of a Pandemic

- Mollie Sharp ARNP, PMHNP-BC

Shoreline Community College | Shoreline, WA

The current evolving pandemic has placed unique demands on those working in labs and microbiology. The lab environment lends itself to a unique situation where the front-line involvement is not as visual yet still imperative and supportive. In this session we will discuss symptoms of depression, anxiety, self-care, burnout, and how the systems many are working in are contributing to compromised mental health. This session will also have resources and considerations in helping others.

- ➡ Identify symptoms of depression and anxiety from a diagnostic perspective and when to consider getting help.
- ⇒ Acknowledge that you, as a healthcare team member, are performing a crucial role in responding to the demands of the pandemic.
- ➡ Identify factors that contribute to stress and burnout and what can be done to address stress and burnout.
- ⇒ Recognize coping skills you are using (maladaptive and adaptive) and how to diversify coping skills.

9:30 - 10:30 AM Session 2

1 Contact Hour

Maximizing Diagnostic Yield From A Low Volume Sample On A Multifunctional Digital Microfluidics Platform

- Rama Sista, PhD

Baebies | Morrisville, NC

This session consists of two parts: Rapid RT-PCR for SARS-CoV-2 and Enzymatic Testing for G6PD. We will provide details about the basics of the digital microfluidics technology (2020 AACC Disruptive technology award-winner) and how micro-liter sized droplets are manipulated using electric voltages. We will also discuss how complex multi-functional (PCR, Enzymatic, Immunoassay, Hematology, Microbiology) digital microfluidic assay systems are built based on the foundation of simple droplet operations. This

session will describe how ultra-rapid RT-PCR testing for SARS-CoV-2 and Enzymatic Testing for G6PD can be performed within 17 minutes using digital microfluidics.

- Describe the basics of electrowetting and advances in digital microfluidics technology.
- Discuss how complex assay systems can be built using simple digital microfluidic droplet operations.
- ⇒ Define how rapid RT-PCR for SARS-CoV-2 and how rapid enzymatic testing for G6PD can be performed using digital microfluidic technology.

Sponsor: Baebies

11:00 AM - 12:00 PM Session 3 1 Contact Hour

Using Digital Cell Imaging to Standardize Differential Morphology to Improve Turnaround Time and Patient Care with Esoteric Case Studies

- Scott Dunbar, MS, BS

CellaVision | Louisville, CO

Discover how digital cell imaging can impact your laboratory with the ability to apply artificial intelligence to standardize and pre-classify WBC and RBC classes and morphology. Understand how remote review software can get you a second pair of eyes (Path Review, etc.) in seconds and finally how to decrease your labor at the differential bench by greater than 50%. This presentation will be show by viewing rare case studies.

- Describe how artificial neural networks standardize hematology morphology.
- Outline how remote review software can improve turnaround time.
- ⇒ Discuss esoteric case studies and share findings with their peers for education.

Sponsor: CellaVision

2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | WEDNESDAY, APRIL 20, 2022

1:00 - 2:00 PM Session 4

1 Contact Hour

Hematology M+Ms: Morphology and Mystery (Case Studies)

- Karen A. Brown, MS, MASCP, MLS(ASCP)[™]
Medical Laboratory Sciences, Department of
Pathology, University of Utah and ARUP Laboratories
Salt Lake City, UT

Hematology instrumentation has advanced to include at least now routinely a 5-part differential and, in some laboratories, automated cell image analysis. Yet, a manual examination of the blood smear is still an essential procedure that provides valuable diagnostic information. If you are a generalist or seeking crosstraining in hematology, are looking for continuing education to maintain certification, or are responsible for teaching hematology, this session serves as a practical review of core concepts in differentiating and identifying leukocytes, erythrocytes, and platelets. Topics will include common morphologic variations in RBCs associated with selected anemias, abnormalities in WBCs as related to benign and malignant leukocyte disorders, and unique features of platelets in inherited platelet dysfunction. This workshop will use case studies and attendee interaction in a virtual format to define important morphologic abnormalities and physiological processes in various disease conditions.

- ➡ Morphologically differentiate abnormal variations in RBCs, WBCs, and platelets.
- Describe underlying physiological processes for abnormal RBC, WBC, and platelet morphology.
- ⇒ Correlate abnormal cellular morphologic variations with case studies.

Sponsor: ARUP



2:30 - 3:30 PM Session 5 1 Contact Hour

Social Determinants of Health & Their Influence on Equity in Laboratory Testing

Catherine Otto, PhD, MLS(ASCP)^{CM}
 Rutgers, State Univ of New Jersey | Newark, NJ

Social determinants of health play a significant role in equity in healthcare delivery, from access to and outcomes for care. Equity is one of the 6 dimensions of healthcare quality that defines patient safety. This session discusses the role of social determinants of health and how it influences laboratory testing services.

- ⇒ Define social determinants of health.
- Describe how the patient safety aim "equity" is influenced by social determinants of health.
- ➡ Identify one method to improve equity with respect to clinical laboratory testing.

4:00 - 5:00 PM Session 6

1 Contact Hour

bioArt Rules and Vitek Configurations

 Jennifer Anderson, MPH, MLS(ASCP)^{cm} bioMerieux Vancouver, WA

This session will review updates in Vitek bioArt rules and configurations to allow users to fully utilize all the features of the Vitek software to achieve better antimicrobial stewardship and regulatory compliance.

- ⇒ Write bioArt (Advanced Reporting Tool) rules to suppress inappropriate antibiotics.
- Perform advanced configurations of Vitek software: results validation configuration, AST configurations, ID configurations, AES configurations.
- ⇒ Program the Vitek software to deduce equivalent antibiotics to report additional antimicrobials that aren't included on the Vitek card.

Sponsor: bioMerieux

2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | THURSDAY, APRIL 21, 2022

8:00 - 9:00 AM Session 7 1

1 Contact Hour

Impact of Personalized Medicine on Higher Education

- Hassan Aziz, PhD

Texas A&M University - Corpus Christi | Corpus Christi, TX

The emerging practice of personalized medicine has a broad impact on all those practicing in the fields of disease prevention, diagnosis, and treatment for the optimal goal of enhancing delivery of healthcare and medical education. The impact of personalized medicine is enormous, however, proper planning to prepare the skillful workforce is mandatory in order to translate the latest advances into clinical practice. In this presentation, we take a conservative approach to focus on trends that will form a probable future through systematic study and pattern-based understanding of past and present.

- Describe the trends that have major implications for the future of health care.
- ⇒ Explain how the listed trends may affect the healthcare careers in the future.
- ⇒ Evaluate possible approaches in preparing a skillful workforce.

9:30 - 10:30 AM Session 8

1 Contact Hour

Resiliency: Bouncing Forward

- Hassan Aziz, PhD

Texas A&M University - Corpus Christi | Corpus Christi, TX

The pandemic has placed unprecedented stress on healthcare professionals. The resultant burden of burnout is extensive. Resilience is a potential tool to mitigate emotional injury to improve mental wellness. Audience will explore the importance of resilience to achieving success for developing skills that will help them persevere in the workplace.

- Define resilience and identify how it applies to adversities.
- Describe the three crisis time frames and explain resilient leadership.
- ⇒ Explore strategies and attitudes associated with resilience building.

Hot Topics in Rapid Testing For COVID-19 and Influenza

- Yuan-Po Tu, MD, DVM

The Everett Clinic | Everett, WA

Regionally relevant and focused on respiratory infectious diseases, we welcome you to join this timely educational program from a leading expert in COVID-19 and influenza.

Join our speaker for an update on upper respiratory illnesses, test methodology, and clinical perspectives on the important role the laboratory plays in supporting rapid testing.

- ⇒ Review the experience and key learnings of the 2021-2022 respiratory season.
- Evaluate various use cases for rapid COVID-19 testing, from large to small healthcare settings and clinical to community surveillance.
- ⇒ Examine evidence related to rapid testing and the potential impact on clinical decision making, antimicrobial stewardship, patient care, and workflows.
- ⇒ Assess needs and best practices for implementing rapid testing strategies

Sponsor: Abbott Rapid Diagnostics



2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | THURSDAY, APRIL 21, 2022

1:00 - 2:00 PM Session 10

1.Contact Hour

Onboard or Overboard? Providing a Life Raft for New Leaders to Keep Them from Sinking

- Jeremy Zacher, MEd

Mayo Clinic | Rochester, MN

This presentation will dive into the development and delivery of an onboarding program for new supervisors and managers, exploring the importance of supporting our new leaders. We will discuss how to build a framework for your program while learning about the value of empathy, perspective, networking, and mentorship to keep your new leaders afloat in their first year and beyond.

- ⇒ Recognize the elements of a successful onboarding program.
- ➡ Identify and categorize challenges to leaders new to their role.
- ⇒ Design a structure for an onboarding program to help tackle the challenges of a new leader.

Sponsor: Mayo Clinic Laboratories

2:30 - 3:30 PM Session 11 1 Contact Hour

The Enhanced Liver Fibrosis (ELFTM) Test and the Unmet Challenges in the NASH Epidemic

- Monet Sayegh, MD

Siemens Healthineers | Simi Valley, CA

Chronic liver disease is a major cause of morbidity and mortality throughout the world. Typical disease etiologies that lead to chronic liver disease include non-alcoholic fatty liver disease (NAFLD), alcoholic liver disease, primary sclerosing cholangitis, primary biliary cholangitis, and viral hepatitis due to chronic infection with hepatitis B virus and hepatitis C virus. NAFLD is now the most common underlying cause of chronic liver disease. In 1994, NAFLD accounted for < 50% of chronic liver disease cases, but due to the increasing rate of obesity, the proportion of NAFLD of chronic liver disease cases jumped to 75% by 2008.

Furthermore, it is anticipated that the incidence of NAFLD will continue to rise in parallel with obesity and type 2 diabetes mellitus. Within NAFLD, nonalcoholic steatohepatitis (NASH) is the more severe form, characterized by hepatic steatosis (fatty infiltration of the liver), inflammation, and hepatocyte injury (ballooning). Prevalence in the United States is estimated to range from 3–5% in the general population and up to 56% in obese individuals. Over the next 20 years, it is estimated that the 6.4 million individuals living with NASH and type 2 diabetes mellitus in the U.S. will account for 65,000 transplants, 1.37 million cardiovascular-related deaths, and 812,000 liver-related deaths

- Describe the NAFLD basics and the role of fibrosis progression and it's prognostic significance.
- ⇒ Describe the use of ELF test as a prognostic indicator of progression to more severe disease.
- ⇒ Outline the basics of NAFLD pathophysiology.

Sponsor: Siemens Healthineers

4:00 - 5:00 pm Session 12 1 Contact Hour

Quality Improvement Tools to Improve Patient Safety: Root Cause Analysis

- Catherine Otto, PhD, MLS(ASCP)^{CM}

Rutgers, State Univ of New Jersey | Newark, NJ

Effective healthcare organizations are continuously learning operations, through application of quality improvement tools. When adverse events occur, a systems perspective can provide insights regarding the factor(s) that were ultimately responsible. This session will present an overview of systems thinking and describe procedures for root cause analysis.

- ⇒ Draw a simple systems diagram.
- Describe the elements of a root cause analysis.
- ⇒ Use a systems diagram and root cause analysis to evaluate an error in the laboratory testing process.

2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | FRIDAY, APRIL 22, 2022

8:00 - 9:00 AM Session 13 1 Contact Hour

COVID-19 Testing at the Point of Care: A New Platform for High Sensitivity Antigen and Antibody Testing

- Brian DuChateau, PhD, D(ABMLI) LumiraDx | Waltham, MA

The allure of point of care diagnostics, shortened time to lab-comparable and clinically actionable information, remains elusive; however, the next generation of point of care testing technology combines lab-comparable testing with rapid results. Innovative technologies have seen rapid adoption, fueled by market demand for testing solutions for COVID-19. These innovative point of care testing technologies also enable consolidation of assays on to a common platform to simplify test management and operator training. LumiraDx, the leader in next generation point of care diagnostics, has developed a microfluidic diagnostic solution intended to consolidate point of care assays on a common analyzer while delivering lab comparable results.

- ⇒ Describe the differences between legacy lateral flow and next-generation microfluidic point of care testing technology.
- ⇒ Evaluate the potential clinical and analytical performance advantages of a high-sensitivity point of care immunoassay when compared to alternative tests for COVID-19 diagnostics.
- ➡ Illustrate potential advantages of total antibody tests compared to isotype-specific assays for recent or prior infection of COVID-19.
- ⇒ Explore possible Use-Cases for Future SARS CoV-2 Antibody Tests.

Sponsor: LumiraDx



9:30 - 10:30 AM Session 14 1 Contact Hour

Sharing Best Practices: Urine Automation Journey

- Amy Schmidt MT (ASCP)
- Desiree Graves MT (ASCP)

Bronson Methodist | Kalamazoo, MI

Manual urine microscopy creates many timeconsuming challenges that affect a lab's workflow and daily operations. This session will explore the process of moving from manual microscopy to automated analysis. The speakers will share their healthcare system's automation journey that promoted lab efficiencies. Case study examples will be reviewed to highlight the benefits of automated technology.

- Recognize the value of urine automation to improve lab workflow efficiency.
- ⇒ State the implementation process and timelines involved in an automation conversion.
- ➡ Discuss the value of automated technology through case study review.

Sponsor: Sysmex America

11:00 AM - 12:00 PM Session 15 1 Contact Hour

Preceptor Training: Presented by Oregon Institute of Technology

- Rachelle Barrett MS, MLS (ASCP)SBB
- Caroline Doty MS, MLS(ASCP)

Oregon Institute of Technology | Wilsonville, OR

Do you have students in your lab for their externship? This is the training you need to be a better teacher. As we all know, training students is a lot different than training a new hire. In this session we discuss teaching tricks that are applicable to the laboratory setting. Applicable for any student situation, however, you can ask questions specific to the Oregon Institute of Technology MLS program.

- Define the responsibilities of the student, preceptor, and department lead during student training.
- Develop tools for giving student feedback on performance in externship.

Sponsor: Oregon Institute of Technology

2022 JOINT SPRING SEMINAR VIRTUAL MEETING EDUCATIONAL SESSIONS | FRIDAY, APRIL 22, 2022

1:00 - 2:00 PM Session 16

1 Contact Hour

Lyme Disease and COVID-19: An Epidemic Within a Pandemic

- Roxanne Carfora, DO

Ageless MD/ Dr Carfora | St James, NY

We will be looking at COVID-19, its new variants, requirements, and mandates. In addition, we will explore Lyme disease as an epidemic within a pandemic. Where and why other diseases are forgotten about and being missed?

- Describe how Lyme Disease is out there in very large numbers.
- ⇒ Discuss how understanding COVID-19 is key to being at ease with it.

Sponsor: Quidel

2:30 - 3:30 PM Session 17

1 Contact Hour

Calibration Verification/ Linearity: Guidelines & Regulations

- Dinah Rauenhorst, MT(ASCP), CLS

Audit MicroControls | Eatonton, GA

This session will review the CLIA regulations as they pertain to Calibration Verification. We will review the "How To's" of Calibration Verification and Linearity, which will include learning about: the difference between Calibration and Calibration Verification, acceptable material, how to perform Cal Ver, and review troubleshooting guidelines.

- Define the difference between calibration, calibration verification, and linearity.
- ➡ List what are acceptable calibration verification materials.
- ⇒ State how and when calibration verification is performed.
- Describe troubleshooting guidelines for a failed calibration verification.

Sponsor: Audit MicroControls

4:00 - 5:00 PM Session 18 1 Contact Hour

Perplexed by Prenatal Patient? Prenatal/Perinatal Testing

- Lay See Er, MSTM SBB(ASCP)cm CQA(ASQ)
- Theresa Nester, MD

BloodWorks NW | Seattle, WA

The purpose of this presentation is to provide participants the opportunity to evaluate prenatal samples and recognize the indications for perinatal testing.

- ⇒ List the indications for perinatal testing.
- ⇒ Discuss the importance of prenatal testing.

Sponsor: BloodWorks NW

Thank you to our Amazing Sponsors

Abbott Rapid Diagnostics
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Check out the Sponsor's page on the website for links to their websites and contacts.

Registration Form

2022 Joint Spring Seminar April 20 - 22, 2022 Virtual Meeting Online registration and credit card payment is available at www.asclsr9.org

or

For mail registration send this form with a check payable to Spring Seminar.

First Name	Last Name
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Category		Fee	Total Fee
ASCLS/AMT Professional/Technical		\$60.00	\$
ASCLS#	AMT#		
Non-Member			\$
Student	\$10.00	\$	
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Your fee covers all three days of the Spring Seminar.

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

Spring Seminar to:

2022 Joint Spring Seminar Brenda Kochis 44 West 26th Avenue Spokane, WA 99203-1818

If questions, contact Brenda Kochis:

Email preferred: ASCLSBren@comcast.net

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

To Register Online:

Go to www.asclsr9.org Click on "Online Registration" to go to the online form. Credit cards can be used to pay for registration.

Registration Deadine: April 19, 2022

This deadline is to allow us to provide the information for access to the Virtual Joint Spring Seminar. Registration is still open after this date.