



INTERMOUNTAIN STATES SEMINAR EDUCATIONAL PROGRAM

OCT. 18-20, 2020 Note: all session times are MDT

SUNDAY, OCTOBER 18, 2020

General Session: 11:30 am-12:30 pm

Session 1: CAP Competencies, Checklists and COVID

Speaker: Earle Collum, MD

Level of Instruction: Intermediate

Sponsor: College of American Pathologists

Contact Hours: 1.0

This session will be a discussion using CAP material on 3 critical areas of regulation: how to perform competencies for testing personnel, the most commonly cited CAP deficiencies and why, and maintaining compliance during COVID-19.

At the end of the session, the participant will be able to:

- Describe how to perform competencies for testing personnel.
- Describe the pitfalls and solutions of the most commonly cited CAP deficiencies.
- List the best ways to stay compliant in the face of COVID challenges

SUNDAY, OCTOBER 18, 2020

General Session: 1:00-2:00 pm

Session 2: Laboratory's New Role in Healthcare/Patient Safety

Speaker: Rahul Patel, PhD

Level of Instruction: Intermediate

Sponsor: Abbott

Contact Hours: 1.0

This session will provide a vision for the Lab of the Future, and the transformation of healthcare. Opportunities to improve your laboratory will be discussed, and how patient safety can be improved through diagnostic powered decision making.

At the end of the session, the participant will be able to:

- Discover a new vision for their lab
- Describe processes and opportunities to improve their lab
- Discuss the role of lab in improving patient safety.

SUNDAY, OCTOBER 18, 2020

Breakout Sessions: 2:15-3:15 pm

Session 3: Patient Safety and Blood Utilization in the Hospital Setting

Speaker: Dr. Plumier

Level of Instruction:

Sponsor: Billings Clinic

Contact Hours: 1.0

This session is intended to be a discussion on current practices in transfusion medicine at the hospital transfusion service level and how they relate to the AABB Standards, management of the blood supply, and patient safety.

At the end of the session, the participant will be able to:

- List current AABB Standards regarding pretransfusion testing
- Discuss current research regarding hospital approaches to the Standards
- Describe the connection between laboratory testing, patient safety, and blood utilization

Session 4: Personalized Healthcare and Companion Diagnostics in Cancer

Speaker: Stella Redpath

Level of Instruction:

Sponsor: Roche Diagnostics

Contact Hours: 1.0

Updates from the field of personalized healthcare, focusing on new companion diagnostic tests available for immunotherapies and targeted therapies in oncology.

At the end of the session, the participant will be able to:

- Describe the current landscape of companion diagnostics testing in oncology
- List the differences between CDx test for immunotherapies and targeted therapies
- Discuss how pan-tumor biomarkers may inform cancer treatment in the future

Session 5: Case Studies in Parasitology

Speaker: Blaine A. Mathison, BS, M(ASCP)

Level of Instruction: Intermediate

Sponsor: ARUP

Contact Hours: 1.0

Fun, bizarre cases in Parasitology!!!

At the end of the session, the participant will be able to:

- Describe the route of infection for various foodborne parasites.
- Describe the clinical presentation of zoonotic parasites.
- Discuss diagnostic issues with unusual and uncommon zoonotic parasites

SUNDAY, OCTOBER 18, 2020

Breakout Sessions: 3:30-4:30 pm

Session 6: Using Power BI to Analyze Laboratory Data

Speaker: Cody Custis, MS

Level: Basic

Sponsor:

Contact Hours: 1.0

Participants will learn the basics of visualization using examples from Marcus Daly Memorial Hospital. The presentation uses examples from MDMH operational data and COVID-19 tracking, going from raw data to interactive dashboards.

At the end of the session, the participant will be able to:

- Identify the pros and cons of popular visualization software (Tableau, Power BI, etc)
- Discuss the tools of dashboards (sliders, heatmaps, line graphs)
- Discuss the basics of data wrangling from unit level data to summary data

Session 7: Establishing a Complexity RT-PCR Lab for COVID Testing

Speaker: Hannah Mirrashed

Level: Intermediate

Sponsor: Quidel

Contact Hours: 1.0

By establishing a COVID Lab we committed to providing a safe, convenient and high complexity COVID testing laboratory to our community and the surrounding areas.

Plumas District Hospital is a rural and critical access hospital in Quincy, California. By opening the COVID lab, PDH quickly supported by local public Health, Schools, Colleges, Fire Departments, U.S. Forest Service and nearby hospitals for COVID testing.

At the end of the session, the participant will be able to:

- Explain necessary tools for training staff
- List major steps necessary in setting new testing in the laboratory
- Discuss the importance of patient safety and community surveillance in Covid-19 testing and follow-up.

Session 8: COVID-Associated Coagulopathy; Controversies and Confusion

Speaker: George Fritsma, MS, MLS(ASCP)

Level of Instruction: Intermediate

Sponsor:

Contact Hour: 1.0

A hemostasis abnormality unmistakably associates with COVID infection progression, but what is the abnormality? Platelet activation? Arterial thrombosis? Sepsis? Hypofibrinolysis? VTE? DIC? LAC? HIT? TMA? We apply routine and specialized hemostasis laboratory assay results to attempt a model and to develop COVID management techniques.

At the end of the session, the participant will be able to:

- Propose the pathophysiology and comorbidities associated with COVID infections.
- Apply relevant Covid diagnostic and prognostic laboratory assays results
- Align Covid lab results and pathophysiology with disease progress

MONDAY, OCTOBER 19, 2020

Keynote 8:30-9:30 am

Session 9: Laboratory Science – Roaring into the 20's

Speaker: Susanne (Susie) Norris Zanto, MPH, MLS(ASCP)^{CM}, SM

Level of Instruction: Basic

Contact Hours: 1.0

Medical laboratory science is roaring full speed into the 2020s, with many changes in the practice and the way services are delivered. This interactive session will contrast and compare society and the practice of medical laboratory science from the 1920's era to now, with a look back and a look forward. The changing role of medical laboratory professionals in healthcare will also be explored.

At the end of the session, the participant will be able to:

- Describe at least two commonalities between the 1920s and the 2020s
- Discuss how the practice of medical laboratory science has changed over the decades
- Explain how the role of medical laboratory professionals is changing in healthcare

MONDAY, OCTOBER 19, 2020

General Session 9:45-10:45 am

Session 10: SARS-CoV-2 Vaccine Development

Speaker: Neeltje van Doremalen

Level of Instruction: Advanced**Sponsor:****Contact Hours: 1.0**

In this session, we will provide an overview of the SARS-CoV-2 vaccines currently in development, the different platforms that are being utilized and the most recent clinical trial results. We will then dive deeper into the pre-clinical development of ChAdOx1 nCoV-19.

At the end of the session, the participant will be able to:

- Describe the differences between different vaccine platforms
- Describe results for SARS-CoV-2 vaccine trials, focusing on phase I/II
- Describe preclinical development of ChAdOx1 nCoV-19.

MONDAY, OCTOBER 19, 2020**General Session 1:15-2:15 pm****Session 11: Clinical Laboratories and Government Affairs Roaring into the 20s: Where Are We Headed?**

Speaker: Debra Shell, MLS(ASCP)^{CM} SM, DLM

Level of Instruction: Basic**Contact Hours: 1.0**

Although passing legislation other than that related to the COVID-19 pandemic has slowed, ASCLS continues to monitor Congressional activities that may impact clinical laboratories. Is there a pandemic silver lining for clinical laboratory professionals, in spite of the many headaches it has caused? We'll discuss ways we can take advantage of an inauspicious start to the 2020s.

At the end of the session, the participant will be able to:

- Discuss pending legislation /regulation impacting clinical laboratories
- Describe effects of COVID-19 on clinical laboratories
- Identify how ASCLS members can make a difference

MONDAY, OCTOBER 19, 2020**Breakout Sessions 2:30-3:30 pm****Session 12: Hematology Update Through Case Studies**

Speakers: Keila Poulsen

Level of Instruction: Intermediate**Sponsor:****Contact Hours: 1.0**

This session will include select cases from categories of RBC's, WBC's, and PLT's. Evolution of classification will be explored. Review of treatment protocols utilizing the latest diagnostic technologies will be discussed.

At the end of the session, the participant will be able to:

- Discuss the latest knowledge involving the cause of the disorder
- Explain the latest classification utilized and why it is in use
- Review some historical attributes of a few select cases

Session 13: Innovation in Fighting HIV And Understanding the Diagnostic Challenges Among PrEP Users

Speaker: Mikael Gencay, PhD

Level of Instruction: Basic

Sponsor: Roche Diagnostics

Contact Hours: 1.0

Innovative approaches are needed in early diagnosis and treatment of HIV. Advanced 4th generation HIV Duo testing approach can speed up the diagnosis and early treatment initiation. In this session, we will learn about innovative HIV Duo testing approach and also understand the challenges in HIV diagnosis among PrEP users.

At the end of the session, the participant will be able to:

- Explain the advantage of new advanced 4th generation HIV testing approach
- Discuss the innovative approach in HIV testing to speed up early treatment initiation
- Discuss the clinical and diagnostic value of the HIV Duo test
- Describe challenges in diagnosis of HIV among Pre-exposure prophylaxis (or PrEP) users

Session 14: Navigating the Ever-Changing Landscape of Testing For SARS-CoV-2

Speaker: Steve Young

Level of Instruction: Intermediate

Sponsor: TriCore Laboratories

Contact Hours: 1.0

I will discuss the following three categories of laboratory tests: nucleic acid amplification, antigen detections and serological that can be used in facilitating your providers with evidence of a current or past SARS-CoV-2 infection. I will focus on how each test type can be used by the participants healthcare facility to aids in the diagnosis and treatment.

At the end of the session, the participant will be able to:

- Explain how to implement different types of nucleic acid amplification tests
- Discuss implementation of antigen testing
- Explain how and if you should implement serological testing

MONDAY, OCTOBER 19, 2020

Breakout Sessions 3:45-4:45 pm

Session 15: Artificial Intelligence and Machine Learning for Intestinal Parasite Detection: Machines Helping Make Humans Better Since 2019

Speaker: Marc Couturier

Level of Instruction: Advanced

Sponsor: ARUP

Contact Hour: 1.0

This session will describe how machines through artificial intelligence and machine learning have been helping make humans better since 2019 in terms of intestinal parasite detection

At the end of the session, the participant will be able to:

- Describe the theory of AI and how models are trained.
- Recognize the role of AI in stool parasite detection for trichrome stains.
- Describe the future applications of AI in parasitology.

Session 16: Molecular Testing for Acute Myeloid Leukemia

Speaker: Nhien Chau

Level: Intermediate

Sponsor: Mayo Clinic Laboratories

Contact Hours: 1.0

It is estimated that there would be almost 20,000 new AML cases in the U.S., with almost 12,000 estimated deaths in 2020. With a 5-year survival rate at about 25%, AML is a severe disease that progresses aggressively. Molecular testing is becoming essential in

AML prognostication and treatment. In this presentation, we will discuss the various molecular testing provided at Mayo Clinic and the information it provides to combat this deadly disease.

At the end of the session, the participant will be able to:

- Understand a general overview of AML
- Discuss various molecular testing available at Mayo Clinic
- Evaluate the diagnostic & prognostic significance these tests provide

Session 17: The Effects of RBC Survival Time on the Clinical Utility of HbA1C

Speaker: Thomas Lohmann, MD

Level of Instruction:

Sponsor: Sebia

Contact Hour: 1.0

This session will focus on the impact of decreased red cell survival on the production of HbA1c, to include clinical conditions that are associated with the reduction in RBC survival.

At the end of the session, the participant will be able to:

- Describe the formation of glycated hemoglobin molecules
- List conditions that will shorten or lengthen the survival times of RBC's in vivo.
- Discuss the different methods used to measure HbA1c, and the effect of hemoglobin variants on analytical and clinical utility of each method.

TUESDAY, OCTOBER 20, 2020

General Session 8:00-9:00 am

Session 18: Moonshine – Adversity to Diversity

Speaker: Jewell Zweegman, Professional Speaker, LMT, MR

Level of Instruction: Basic

Sponsor: Billings Clinic

Contact Hours: 1.0

Moonshiners were made by those considered low lifes, illiterate, poor folk with no education. Were they really that? Think of what has become of those days of Moonshine, Mob, and the Freeness that United States embraced in the Roaring 20's. What became of them and what will become of us in the 2020's.

At the end of the session, the participant will be able to:

- Explain how to create a better situation while keeping within the parameters of law or regulations.
- Describe how adversity gives birth to diversity and ingenuity
- Use lessons learned in this session to improve your well-being in a time of COVID-19 and other illnesses

TUESDAY, OCTOBER 20, 2020

General Session 9:15-10:15 am

Session 19: Career Resilience

Speakers: Aga Sypniewska, MBA, GCDF

Level of Instruction: Intermediate

Sponsor: Kaiser Permanente

Contact Hours: 1.0

This session will introduce participants to the concept of career resilience and how developing it can help employees manage their careers. The presentation will show how resilience is a skill, not a personality trait, and can be developed. The session will also unpack the different characteristics of resilience and explain how each could be strengthened over time. Participants will be able to reflect on their own state of resilience at the very moment and plan how they want to go about strengthening it to benefit their careers and professional lives.

At the end of the session, the participant will be able to:

- Define resilience and explain how it impacts career management
- Describe the different characteristics of resilience and how they can be developed
- Reflect on one's own state of resilience and plan actions to strengthen it over time

TUESDAY, OCTOBER 20, 2020

Breakout Sessions 1:30-2:30 pm

Session 20: Solving the Syphilis Testing Puzzle Using Multiplex Technology

Speaker: David Tomichek MBA, BS, MT(ASCP)

Level of Instruction: Intermediate

Sponsor: Bio-Rad Laboratories

Contact Hours: 1.0

The CDC Syphilis algorithm requires testing by multiple methodologies. This session will explore the use of multiplexing technology to assist in completing the challenge faced by laboratories in choosing which direction to proceed.

At the end of the session, the participant will be able to:

- Differentiate between the Forward and Reverse Testing algorithm
- Explain the Multiplex methodology and its role in Syphilis testing
- Make an informed choice on which Syphilis testing algorithm to select

Session 21: COVID-19 Convalescent Plasma: Uncharted Territory

Speaker: Amanda Barzak

Level of Instruction: Intermediate

Sponsor:

Contact Hours: 1.0

The journey of a hospital-based donor center on a path to contributing to the nation-wide push to provide COVID-19 Convalescent Plasma (CCP) will be discussed. The initial planning meeting was on March 30 and the CCP product was on the shelf and issued April 16. In this session, we will discuss the importance of having a pandemic plan, and the process used to establish collection, processing and distribution of Covid-19 Convalescent Plasma.

At the end of the session, the participant will be able to:

- Describe the plan for a pandemic in a community hospital setting.
- List the resources for collaboration on a COVID-19 Convalescent Plasma (CCP) treatment project.
- Explain the process of collection, plasma preparation and distribution of CCP treatment for critically ill COVID-19 patients

Session 22: Obstetric Antiphospholipid Syndrome (APS): Diagnosis, Treatment, Controversies

Speaker: Ware Branch

Level of Instruction: Intermediate

Sponsor:

Contact Hours: 1.0

This lecture presentation will review the diagnosis and treatment of antiphospholipid syndrome (APS) in pregnancy, focusing on aspects of obstetric APS and current controversies with regard to the diagnosis. Novel treatments will be discussed.

At the end of the session, the participant will be able to:

- Make the diagnosis of antiphospholipid syndrome (APS)

- Describe the “standard treatment” of APS in pregnancy, as well as novel treatments
- Discuss the controversies related to diagnosis and treatments

TUESDAY, OCTOBER 20, 2020

Breakout Sessions 2:45-3:45 pm

Session 23: Respiratory Viruses in Children: How Clinical Lab Testing in Research Leads to Better Patient Care

Speaker: Jon Windsor

Level of Instruction: Intermediate

Contact Hours: 1.0

High-Quality Clinical Laboratory Testing is essential for the diagnosis, monitoring, and treatment of respiratory infections in children. When used for research, it can help drive future clinical decision-making. We share findings from the RAPID study at the Children’s Hospital of Colorado and how clinical lab testing was essential for success.

At the end of the session, the participant will be able to:

- Describe respiratory viruses that commonly affect children
 - Respiratory Syncytial Virus (RSV)
 - Influenza
 - Human Rhinovirus/Enterovirus (HRV/HEV)
 - Parainfluenza
- Provide a brief overview of Multiplex PCR
- Describe the R.A.P.I.D. parent study
- Compare the severities of each respiratory virus to one another
- Discuss how these findings can inform future practice

Session 24: Lab Week, An Opportunity to Promote and Educate

Speaker: Barbara Harvey, MLT(ASCP)BS.MA.Ed

Level of Instruction: Intermediate

Contact Hour: 1.0

This interactive session will provide the participants with resources, guidelines and ideas to create educational activities and materials to use during National Lab Week, career fairs or classroom guest presentations. Following the presentation, participants will, as a group, brainstorm objectives/topics from various lab areas and develop activities as time permits.

At the end of the session, the participant will be able to:

- Locate resources for the creation of educational activities/materials.
- Identify goals and learning objectives
- Create materials and activities that meet goals and objectives

Session 25: Antibody Tests in The Fight Against COVID-19 – Why They Are Critical and Factors to Consider for Implementation

Speaker: Dr. Fernando Chaves

Level of Instruction: Intermediate

Sponsor: Ortho Clinical Diagnostics

Contact Hours: 1.0

In this session we will review the various diagnostic technologies available in the fight against COVID-19 and understand their advantages and limitations. We will review the various types of serological tests available today, and their various potential clinical and epidemiological uses in the fight against the pandemic. We will conclude by discussing key factors to consider when selecting idea antibody tests for these various uses.

At the end of the session, the participant will be able to:

- Discuss the advantages and limitations of various diagnostic technologies available against COVID-19.
- List the clinical and epidemiological uses of antibody tests.
- Review the key factors to consider when assessing the various types of antibody tests available in the market today.

