

# PROGRAM SYNOPSIS Jackson, Wyoming Sep.27-Sep.29, 2018

THURSDAY, SEPTEMBER 27, 2018 8:15-9:45 am

KY. Keynote/GSA: The Zen of Professionalism Speaker: Kathy Doig, PhD, MLS(ASCP)<sup>CM</sup>SH<sup>CM</sup>

**Level of Instruction: Intermediate** 

**Sponsor: ASCLS Region VIII** 

Contact Hours: 1.0

Active professional society participation requires giving up time, dollars, and perhaps other resources. Yet, studies show that professionally active individuals experience a greater sense of professional satisfaction. How can it be that giving away results in greater satisfaction? That's the zen associated with professional service to be explored in this session.

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

- Describe how professional society participation can be used to expand one's professional skill set
- Describe how professional society participation can be modulated to fit one's life and time restrictions
- Commit to active professional society membership

Thursday, September 27, 2018
Breakout Sessions 10:00-11:00 am

1. Immunohematology and Reproductive Medicine

Speaker: Dr. Walter Kelley

**Level of Instruction: Intermediate** 

Sponsor: ARC

Contact Hours: 1.0

This session will be a discussion of immunohematology cases involving reproductive medicine

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

- Describe the recommended samples needed for complex immunohematology evaluation
- Explain the immune mechanism of HDFN
- Relate uncommon antibodies and maternal history

## 2. Companion Diagnostics and Lung Cancer - Updates in Immunotherapies and

**Targeted Therapies** 

Speaker: Dr. Stella Redpath

Level: Intermediate Sponsor: Roche Contact Hours: 1.0

This session will provide an up to date overview of biomarkers and tests available for pathologists and oncologists considering immunotherapies and targeted therapies for patients diagnosed with lung cancer. The presentation will include anatomic pathology, molecular pathology and next-generation sequencing testing, the tumor microenvironment and potential new areas of study.

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

- Describe the current landscape for pathology companion diagnostic testing in lung cancer
- Describe the differences between companion diagnostic tests for immunotherapies, and those tests for targeted therapies
- Compare new biomarkers and test technologies which will impact patient care in lung cancers

# Thursday, September 27, 2018 GENERAL SESSION 1:00-2:00 pm

**General Session B. STIs: From Established to Emerging** 

Speaker: Melissa Maxwell-Stropes, Ph.D.

**Level of Instruction: Basic** 

Sponsor: Hologic
Contact Hours: 1.0

This will be an opportunity to educate the audience about sexually transmitted infections—from the familiar to the "new"! An update will be provided on the potential clinical consequences of infection, an update on screening recommendations, and possible future directions.

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

- Review the clinical consequences of infection (PID, urethritis, cervicitis, etc)
- Review current screening recommendations
- Review clinical data surrounding Mycoplasma genitalium—a "new" STI

# Thursday, September 27, 2018 Breakout Sessions 2:15-3:15 pm

# 3. Improving Antibiotic Stewardship and Sepsis Management with Rapid Culture Independent Molecular Diagnostics

Speaker: Sandy Estrada, Pharm.D.

Level: Intermediate Sponsor: T2 Biosystems Contact Hours: 1.0

Implementation of molecular techniques in clinical laboratories has revolutionized the diagnosis, treatment and monitoring of patients with serious infections. This course intends to review the data and describe the impact of enhanced laboratory diagnosis through culture-independent molecular techniques, focusing on improved time to appropriate therapy, antibiotic stewardship, and cost savings.

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

- Describe how culture-independent tests can improve antibiotic stewardship
- Summarize studies demonstrating the impact of culture-independent tests
- Review patient case studies describing the impact of culture-independent tests on treatment decisions

### 4: Ethics, Stewardship, And Laboratory Tests with Unproven Clinical Benefit

Speaker: Brian Jackson, MD, MS Level of Instruction: Intermediate

Sponsor: ARUP
Contact Hour: 1.0

Laboratories often receive orders for tests that lack strong evidence of clinical utility. Some are of research interest, some are commercial in nature, and others are simply new to the clinical scene. This presentation will present a bioethics perspective on when and how laboratories should support such testing.

- Describe the foundational bioethical principles in the Belmont Report and Declaration of Geneva.
- Describe the primary ethical tradeoffs in use of lab tests with unproven clinical utility
- Describe ethically sound ways to introduce new tests into clinical settings

5: What's New About Hemolytic Jaundice and Iron Salvage?

Speaker: Kathy Doig, PhD, MLS(ASCP)<sup>CM</sup>SH<sup>CM</sup>

**Level of Instruction: Intermediate** 

Sponsor: ASCLS Region VIII

Contact Hour: 1.0

Modern cell biology has improved explanations of the processes that occur during accelerated hemolysis. Familiar laboratory findings are now better understood, like why hemosiderin is found in renal tubular cells during excessive hemolysis. Current understandings of bilirubin production/ processing and iron salvage will be discussed in normal and hemolytic conditions.

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

- Describe hemoglobin catabolism and iron salvage under normal circumstances.
- Describe hemoglobin catabolism and iron salvage during excessive macrophagemediated hemolysis and excessive fragmentation hemolysis
- Recognize patterns of laboratory test results consistent with macrophagemediated hemolysis and excessive fragmentation hemolysis

Thursday, September 27, 2018
Breakout Sessions 3:30-4:30 pm

6. Diagnostic Medical Parasitology: 2018 Update

Speaker: Lynne Garcia, MS, CLS, FAAM

Level of Instruction: Intermediate

**Sponsor: Medical Chemical Corporation** 

Contact Hours: 1.0

The session will discuss newer practical diagnostic methods, emerging and newly classified pathogens, non-endemic infections now endemic within the United States, and risk management and diagnostic problems associated with blood testing. As neglected parasitic infections become more widely recognized, the need for better patient care continues to expand. A handout will be provided.

- Describe newer fecal fixatives and their importance for cost-effective testing
- Discuss the importance and incidence of *Dientamoeba fragilis* and *Blastocystis hominis* within the United States
- List and discuss several helminth infections now endemic in the United States
- Describe the risk management aspects of malaria testing and differences between naïve patients and those living in endemic areas
- Discuss possible parasitic infections being seen in returning military and private contractor personnel laboratory community

7. cobas m 511 Change the Way You Look at Hematology

Speaker: Krista Curcio, MT(ASCP), MBA Level of Instruction: Intermediate

Sponsor: Roche
Contact Hours: 1.0

This session will discuss the use of digital multispectral image analysis on the cobas m 511 to determine CBC parameters and provide digital images for technologist review.

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

- Describe digital multispectral image analysis
- Describe how RBC parameters are evaluated using digital multispectral image analysis
- Describe how WBCs are differentiated using digital multispectral image analysis

### 8. Earlier Prediction of Patient Risk for Acute Kidney Injury

Speaker: Dr. Jared Jaeger Level of Instruction:

**Sponsor: Ortho Clinical Diagnostics** 

**Contact Hours: 1.0** 

Attendees will gain a broader understanding of the incidence and implications of acute kidney injury. They will also learn about new biomarkers that can predict acute kidney injury, allowing physicians to intervene and potentially avoid the morbidity and mortality associated with the condition

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

- Describe the importance and impact of acute kidney injury
- Name a new diagnostic tool for prediction of acute kidney injury
- Detail the implications of early acute kidney injury identification

### FRIDAY, SEPTEMBER 28, 2018

8:00-9:00 am

General Session C: We are Family?! Huh?! Really!?

Speaker: Jewell Zweegman Level of Instruction: Basic Sponsor: Billings Clinic Contact Hours: 1.0

This presentation will teach how to have healthy relationships with the members of their work team. Will show how to communication effectively, and how to listen and really hear what someone may be saying to them? How to maintain a healthy balance between work and personal life.

- Promote clear communication
- Practice effective listening
- Explain how to maintain balance between work and personal life

#### 11:00-12:00

General Session D: Addressing the Clinical Laboratory Workforce Shortage

Speaker: Susanne Norris Zanto, MPH, MLS(ASCP)<sup>CM</sup>, SM

Level of Instruction: Intermediate Sponsor: Laboratory SolutionZ

Contact Hours: 1.0

Effects of the current shortage of qualified clinical laboratory professionals is being felt throughout the laboratory community. To better understand this situation, ASCLS charged a task force with writing a position paper on the workforce shortage, which was approved in August 2018. This session will describe recent data on the workforce shortage, reasons for the shortage, and the impact on laboratories, patient care, and educational facilities. Efforts to address this shortage by multiple organizations, including ASCLS, CCCLW, ASCP, and APHL, will be described and demonstrated.

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

- Discuss the current state of the clinical laboratory workforce.
- Explains at least 4 reasons for the workforce shortage, and the impact on laboratories, patient care, and education facilities
- Describe ways the laboratory community is addressing the shortage.

## Friday, September 28, 2018

12:10-1:10 pm

## **MID Midday Round Tables**

**Contact Hours: 1.0** 

These informal round table presentations and discussions will center on issues in the represented area of knowledge that are recently impacting laboratory practice. Choose one to attend

- 1. Dawn Tobin, Urinalysis History and Case Studies; Sponsor: Beckman Coulter This presentation includes a brief look back in time to the beginnings and history of urine analysis, and concludes with some fun case studies This presentation includes a brief look back in time to the beginnings and history of urine analysis, and concludes with some fun case studies
  - Overview of the history and importance of urine analysis
  - Discuss the correlation between chemistry and microscopic results, and considerations for when they do not agree
  - Review case studies showing abnormal cells in the urine
- 2. Kelly Amidei; Point of Care Testing Competency Assessment; Sponsor: Billings Clinic

Presentation of the new competency assessment process utilized by the Billings Clinic Point of Care Testing program, followed by a roundtable discussion of assessing competency in the Point of Care setting.

- List 3 of the 6 elements required by CMS for assessing competency of Point of Care testing personnel
- Describe the competency assessment requirements for the 3 categories of POC testing systems: waived, moderately complex, and provider performed microscopy (PPM)
- Participate in a roundtable discussion to share and learn ideas regarding assessing competency in the POC setting

# 3. Lynne S. Garcia, MS, CLS, FAAM; Practical Approaches To Diagnostic Parasitology; Sponsor: Medical Chemical Corporation

This round table will provide practical approaches to diagnostic medical parasitology. Specimen handling, testing, and reporting (importance of result comments) will be discussed, emphasizing recommended changes during the past few years. Relevant changes in organism pathology and new endemic pathogens in the U.S. will also be covered. Practical bench methods will be covered with time for questions and discussion

- Discuss the pros and cons of fecal specimen preservation and the use of universal fixatives for routine and molecular methods.
- Review protozoan pathogens and their changes in pathogenicity for patient care.
- Discuss several blood parasite infections/organisms that are now endemic within the United States.

## Friday, September 28, 2018 Breakout Sessions 1:20-2:50 pm

# 9. How Technology & Rapid Molecular Diagnostics Are Changing the Paradigm of Antibiotic Stewardship

Speaker: Bill Marquardt, C(ASCP), MBA, CLSSBB

Level of Instruction: Intermediate

Sponsor: McKesson Contact Hours: 1.5

This session will provide insight into how informatics, molecular diagnostics, and clinical change management can be used together to implement an effective antimicrobial stewardship program. Advancements in microbiological diagnostics including MALDI-TOF and rapid molecular diagnostics, and advancements in technology including real-time antibiograms, stewardship and clinical collaboration work tools, precision antimicrobial therapy, and care planning and disease state reporting will be shown. In addition, the laboratorian's role in antimicrobial resistance will be discussed.

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

- Define the latest developments in diagnostics including how it is used in the overall treatment of infectious disease and how it is changing the way we think about prescribing antibiotics
- Describe why technology is the cornerstone of antimicrobial stewardship programs and some of the challenges involved with implementing large scale solutions
- Demonstrate a practical example of how McKesson and Merck has partnered with a solution that addresses both the technology and diagnostics of AMS

## 10. Cultivating a Culture of Quality & a Practical Workshop of Cost of Poor Quality

Speaker: Jennifer Dawson

**Level of Instruction: Intermediate** 

**Sponsor: ASCLS Region VIII** 

**Contact Hours: 1.5** 

Many organizations establish quality objectives, but true effectiveness requires a commitment to various cultural elements including leadership, a compelling quality policy, expected behaviors and complementary performance metrics and incentives. The first half of this session explores essential attributes to achieving a culture of quality in a laboratory, several of which are required for ISO 15189 conformance. By reducing or eliminating Cost of Poor Quality (CoPQ) resulting from adverse or nonconforming events, your lab can increase its profit margin and demonstrate a return on investment for quality initiatives. The second half of this session will demonstrate how you can calculate and leverage CoPQ.in your laboratory.

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

- Implement initiatives and programs to foster a culture of quality in their labs
- Review and practice a methodology to capture and track Cost of Poor Quality (CoPQ)
- Analyze how labs can articulate the CoPQ concept and data to demonstrate a return on investment for their quality efforts

#### 11. Those Bodacious Body Fluids: A Hematology Perspective

Speaker: Lynn Maedel, MLS, SH Level of Instruction: Intermediate

Sponsor: Sysmex Contact Hours: 1.5

Body Fluid morphology can present challenges to the laboratory professional who does not perform this evaluation on a daily basis. Using images from Wright-stained cytocentrifuged slide preps, this presentation provides numerous opportunities for participants to examine normal, reactive and malignant cell morphology. Key differentiating cell characteristics and patterns are illustrated using serous, and cerebral spinal fluid specimens.

- Identify clinically relevant microscopic elements seen in Wright-stained slide preparations made from different body fluids
- Describe key morphologic features and patterns of normal, reactive and malignant cells seen primarily in serous fluids
- Differentiate mesothelial cells and ventricular lining cells from tumor cells

# Friday, September 28, 2018 Breakout Sessions 3:15-4:45 pm

# 12. Digital Cell Morphology, Improving the Quality, Consistency And Connectivity Of The Hematology Laboratory With Relevant Esoteric Case Studies

**Speaker: Scott Dunbar** 

Level of Instruction: Intermediate

Sponsor: CellaVision
Contact Hour: 1.5

This session will cover how computer-based algorithms came improve quality, consistency and turnaround time in the hematology laboratory. The attendee will view rare hematology cases.

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

- Describe how artificial neural networks can standardize a subjective area of the lab
- Discuss how remote review software can improve turnaround time
- Share rare leukemia and lymphoma case studies and discuss how software innovations have improved RBC standardization

## 13. Monitor Heparin with Confidence Speaker: Sandy Gardner, BS, MT(ASCP) Level of Instruction: Intermediate

Sponsor: Siemens
Contact Hours: 1.5

This session will be a discussion covering the use of heparin as an anticoagulant and how Unfractionated and Low Molecular Weight Heparin are monitored. The advantages and disadvantages of using the aPTT assay to monitor Unfractionated Heparin will be explored, as well as studies showing that the Heparin anti-Xa assay for monitoring Unfractionated Heparin can improve hospital workflow and provide better patient outcomes

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

- Identify types of heparin.
- Explain how heparin dosing is monitored.
- Explain advantages of a Heparin anti-Xa assay for monitoring unfractionated heparin

### 14. Pre-Analytical Factors Contributing to Lab Error

Speaker: Lynn Todd Level of Instruction: Basic Sponsor: From OW to WOW

**Contact Hour: 1.5** 

This session is an interactive format. We will discuss pre-analytical errors, tube additives and order of draw. We will cover sampling and handling errors in addition to what pre-pre and post-post analytical errors are.

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

- Describe what is meant by pre-pre-analytical error.
- List sampling and handling errors.
- Discuss the consequences of pre-analytical error.

# SATURDAY, SEPTEMBER 29, 2018 Breakout Sessions 8:15-9:45 am

#### 15. Medical and Laboratory Investigation of Thyroid Disorders

Speakers: Dr. Angela Durden Level of Instruction: Advanced

**Sponsor: Yellowstone Pathology Institute** 

Contact Hours: 1.5

The presentation will highlight common thyroid disorders and, through the use of case studies, will demonstrate how laboratory tests are used to differentiate thyroid disorders in clinical settings.

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

- Explain the anatomy and function of the (normal) thyroid gland
- Discuss the most common thyroid disorders encountered in medical practice
- Outline clinical and laboratory algorithms for diagnosing thyroid dysfunction

#### 16. Cystic Fibrosis Microbiology, Including Nontuberculous Mycobacteria

Speaker: Dr. Max Salfinger

Level of Instruction: Intermediate Sponsor: National Jewish Hospital

Contact Hours: 1.5

Annually, about 1,000 new cases of CF are diagnosed. People with CF are at a greater risk of getting lung infections; >10% will experience a pulmonary infection with NTM. This session will describe the bacteria recovered from CF patients and discuss the latest microbiology guidelines in working up respiratory specimens.

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

• describe the bacteria recovered from CF patients

- discuss the latest microbiology guidelines in working up respiratory specimens from people with CF
- explain the assays for the identification of nontuberculous mycobacteria

# Saturday, September 29, 2018 Breakout Sessions 10:00-11:30 am

#### 17. Stem Cell Collections For Bone Marrow Transplants And Photopheresis

Speaker: Tonya Carr, MLS(ASCP)
Level of Instruction: Intermediate

**Sponsor:** 

**Contact Hours: 1.5** 

This session will give a brief overview of the types of bone marrow transplants and how they use stem cells. We will go over how the stem cells are collected, processed and transfused. We will also discuss another apheresis procedure called photopheresis: what it is and when it is used.

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

- Discuss the different types of bone marrow transplants
- Describe how stem cells are collected, processed and transplanted for bone marrow transplants
- Describe what photopheresis is and when it is used

# 18. Removing Barriers to the Prevention of Hepatitis C in a Western Frontier Community

Speakers: Leslie Fowler, BSN, RN Level of Instruction: Intermediate

Sponsor:

**Contact Hours: 1.5** 

This session will provide an overview of Population and Frontier County classification criteria, unique public health challenges in frontier populations, collaboration with community stakeholders to identify barriers to preventing HCV transmission and develop strategies to overcome these barriers.

- Demonstrate an improved understanding of population and frontier county classification criteria
- Recognize barriers to communicable disease transmission prevention in frontier settings
- Choose appropriate stakeholders when working on a population health issue in a frontier community

