



October 3-5, 2021

**THE 58th ANNUAL
INTERMOUNTAIN STATES SEMINAR,
ASCLS REGION VIII!!**

This regional conference and Exhibit Expo will mark the 58th year of fun and learning with colleagues and friends. Enjoy great topics, speakers, exhibitors and much fun! All events including education, exhibits, networking, and fun will take place at the Snow King Resort in beautiful Jackson, Wyoming. For the past 50+ years, the Intermountain States Seminar and Exhibitors Expo has been a staple for continuing education for laboratory professionals in the five-state Intermountain Region including Colorado, Idaho, Montana, Utah and Wyoming. Let's have some fun while keeping abreast of the latest technologies and visiting with our friends and colleagues!

Each day begins with informative General Sessions with this year's topics to include:

- ★ **Dr. Hassan Aziz** – This past year has been filled with many challenges that have rippled through medical laboratories nationwide. Come listen as Doctor Hassan discusses how we can turn crises into opportunities for growth and advancement.
- ★ **Dr. Rodney Rohde** – “Doc R” is a prolific speaker, presenter, and author who recently found himself in the spotlight during the recent pandemic. He will talk to us about how his experiences and how we can leverage our expertise to raise our public visibility.
- ★ **Michele Fisher** – The balance between creativity and quality control is a delicate one. Michele will discuss methods for stimulating new ideas while accounting for human limitations and maintaining order in the laboratory.
- ★ **Jewell Zweegman**—In this address we will learn about how the Zulu people and Admiral Nelson worked together to better themselves and think outside the box.
- ★ **Lucia Berte** –Learn how to extend laboratory quality management into your personal life!

Then, choose from among many first-rate P.A.C.E. ® - accredited breakout sessions for updates and information on a variety of topics and disciplines in Laboratory Medicine.

Our Vendor and Exhibit Hall will showcase new instrumentation, reagents, and supplies used in the laboratory every day! Please make a point to come to our exhibitor sessions and visit with them. **Without their participation this meeting would not be possible!**

**History of the Intermountain
States Seminar**

The idea of establishing an Intermountain States Seminar originated with the Utah Society for Medical Technology in 1962. Idaho joined Utah in promoting this idea and offered to act as the first host state. Jackson Hole, Wyoming was proposed as the meeting site if Wyoming would join forces. Not only did Wyoming agree, but Montana also wanted to participate in the venture. All four states realized a combined seminar would provide noted speakers, quality workshops, and active participation. Colorado joined the Intermountain States Seminar as the fifth state in 1970.

The first seminar was held in May of 1964. Subsequent meetings have been held in September. The five states developed a rotation for hosting the annual convention as follows: Idaho, Utah, Colorado, Wyoming, and Montana.

In 1967, a Coordinating Committee was established to assist in planning and to provide continuity to the Seminar. The Coordinating Committee was comprised of two members from each of the five states serving terms of five years. An exhibitor liaison from each state was also a member of this committee. The Planning Committee from the host state organized the many aspects of the seminar.

Baxter Scientific Products established the “IMSS Medical Technologist (Clinical Laboratory Scientist) of the Year” award in 1966. Each participating state submits a nominee for this award.

The success of the seminar is an excellent example of medical laboratory personnel working together to better their profession.

In 2013, the decision was made to have ASCLS Region VIII become the official sponsor and host of future Intermountain State Seminars. A joint Seminar was held in 2014 with the Coordinating Committee and Region VIII hosting, and for the first time in 2015, IMSS was hosted by ASCLS Region VIII, with a rotation schedule developed to have Planning Committee Chairs from all 5 states participate in planning the meeting.



Like and Follow IMSS on Facebook
Intermountain States Seminar (IMSS)
Post your Jackson pics, and show folks back home what they are missing!

❖ *Region VIII 2021 IMSS Planning Committee* ❖

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General Chair Erika Buchanan
 Lisa Platter
 ProgramHolly Weinberg
 Mary Galindo
 Sponsorship Omar Munoz
 Social Cara Bushmaker
 Barbara Harvey
 Exhibits Liaison..... Debbie Shell
 Ian Wallace
 Registration Barbara Harvey
 Jennifer Wolcott
 Publicity Grant Edvalson
 Tina Dihle
 P.A.C.E* Amy Huse
 Omar Munoz
 Region VIII Director Stephanie Mihane
 Finance..... Cathy McNary
 Website and Social Media... Lisa Platter

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❖ *State Society Presidents* ❖

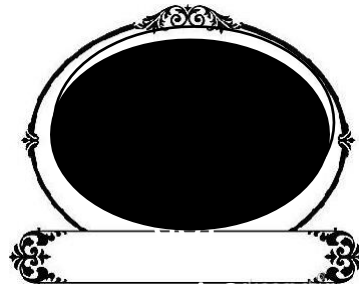
ASCLS – ColoradoTina Dihle
 ASCLS – Idaho Melissa Dumoulin
 ASCLS – Montana Holly Weinberg
 ASCLS – Utah Omar Munoz
 ASCLS – Wyoming Leslie Richendifer

❖ *Nominees for IMSS member of the Year* ❖

Colorado Erika Buchanan
 Idaho Marjorie Montanus
 MontanaAbbey Wichman
 Wyoming.....Barbara Harvey

Registration Desk is located within the Snow King Resort!

Sunday, October 3 10:00 am – 5:00 pm
 Monday, October 4 7:00 am – 5:00 pm
 Tuesday, October 57:00 am – 3:00 pm



❖ *General Information* ❖

- ❖ All events will be held in the Snow King Resort
- ❖ Badges must be worn for admission to all sessions, social functions and exhibits.
- ❖ Silence all electronic devices during educational sessions and meetings.
- ❖ Smoking is not allowed in any event.

The *American Society for Clinical Laboratory Science* is a provider of continuing education programs in the medical laboratory sciences by the ASCLS Professional Acknowledgment for Continuing Education (P.A.C.E. ®) Program. All 2021 IMSS educational sessions have been approved through the ASCLS P.A.C.E. certification and administered by Amy Huse and ASCLS-ID P.A.C.E. ® credits are accepted by the American Society for Clinical Pathology (ASCP) Certification Maintenance Program.

Remember: You will get your P.A.C.E. ® credits on-line using a code given out at the end of each educational session. Check your registration bag for new changes this year.

COVID-19 PRECAUTIONS AND CONSIDERATIONS

The American Society for Clinical Laboratory Science is committed to the safety and health of all of our members, exhibitors, and guest speakers. Masks and hand sanitizers will be provided for all those at the conference who wish to use them. The IMSS will continue to follow all current CDC and state guidance to help limit the possible spread of COVID-19. Please check all local and state guidance prior to your arrival in Jackson Hole for the most current information and protocols.



Masking mandates aside, masking might be a good idea come casino night to help with your “poker face” 😊

A BIG THANK-YOU TO
OUR 2021 EXHIBITORS
& SPONSORS!

2021 IMSS Exhibitors

Abbott Diagnostics
Abbott Point of Care
ARUP Laboratories
BD Life Sciences Integrated Diagnostic
Solutions
Beckman Coulter
Binding Site
BioFire Diagnostics
Biomerieux
Bio-Rad Laboratories
GenMark Diagnostics
Global Focus Marketing and
Distribution
Immucor
Kurin, Inc.
Karius
Luminex
Medical Chemical Corp.
Nova Biomedical
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Quest Diagnostics
Sebia USA
STAGO
T2 Biosystems
Thermo Fisher Scientific
WSLH Proficiency Testing

2021 IMSS Sponsors

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Siemens
Roche
DiaSorin Molecular
Sebia
Mayo Clinic Laboratories
Yellowstone Pathology Institute
Nova Biomedical
Abbott
Bio-Rad Laboratories
National Jewish Health
WSLH Proficiency Testing



We want to recognize these generous sponsors and exhibitors for their support of IMSS. Where would a card game be without the dealer? These amazing contributors have made everything possible through their financial support, speaker sponsorship as well as through providing goods and services. We want to thank them for their generosity and for being the “real deal” of this year’s IMSS!

Sunday Night Social

You are warmly invited to our 2021 Casino Royale Social! We will all be meeting at 5:30 pm in the Snow King Resort. For a small cover charge, we will enjoy lots of appetizers and a no-host bar! Come try your luck as we play a number of fun card games including poker and Blackjack '21. Don't miss this chance to win big!



Schedule at a Glance

All events taking place at the
Snow King Resort

Sunday, October 3

10:00am - 11:00am Registration and Welcome
11:00am – 12:00pm Keynote / General Session
12:15pm – 1:15pm scientific roundtable luncheon
1:15pm – 1:30pm Networking Break
1:30pm – 2:30pm Breakout Sessions
2:30pm – 2:45pm Networking Break
2:45pm – 3:45pm Breakout Sessions
3:45pm – 4:00pm Networking Break
4:00pm – 5:00pm General Sessions
5:30pm – 8:00pm Social

Monday, October 4

7:00am – 8:00am Registration and Welcome
8:30am – 9:30am Keynote / General Session
9:30am – 9:45am Networking Break
9:45am – 10:45am General Session
11:00am – 1:30pm Lunch with the exhibitors
1:30pm – 2:30pm General Session
2:30pm -2:45pm Networking Break
2:45pm – 3:45pm Breakout Sessions
3:45pm – 4:00pm Networking Break
4:00pm – 5:00pm Breakout Sessions
5:00pm – 7:00pm Vendor Reception and Silent Auction

Tuesday, October 5

7:00am – 8:00am Registration and Welcome
8:00am – 9:00am General Session
9:00am – 9:15am Networking Break
9:15am – 10:15am Breakout Sessions
10:15am – 11:15am ASCLS updates, Legislative update, and awards
11:15am – 1:15pm Lunch with the exhibitors
1:30pm – 2:30pm Breakout Sessions
2:30pm – 2:45pm Networking Break
2:45pm – 3:45pm Closing Keynote

* Program schedule is tentative and subject to change*

Special Events!

All work and no play makes IMSS a dull conference. That's why this year we have a number of fun activities and special events that you're not going to want to miss!

Sunday, October 3rd

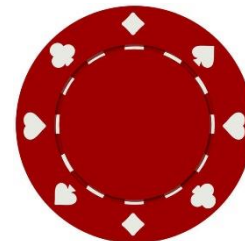
- ★ Participate in a scientific roundtable discussion 12:15 pm – 1:15 pm
- ★ From 5:30 pm – 8:00 pm we will be having our 2021 Casino Royale Social! Come try your hand at some fun card games and enjoy appetizers and drinks for a small cover charge!

Monday, October 4th

- ★ Come between 11:00 am – 1:30 pm and have **lunch with the Exhibitors!**
- ★ **Vendor Reception / Silent Auction**
As is tradition, we will be holding a silent auction from 5:00 pm – 7:00 pm. Take this time to get to know your vendors, without whom this conference wouldn't be possible! All proceeds from this event will be donated to the free clinic in Jackson.

Tuesday, October 5th

- ★ Come between 11:15 am – 1:15 pm and have **lunch with the Exhibitors!** This will be your last chance to view the exhibits!



CONFERENCE SCHEDULE

SUNDAY, OCTOBER 3, 2021



Session #1 11:00am – 12:00 pm

Opening Keynote—Personalized Medicine: Transforming Health Professions

◆ Hassan A. Aziz, PhD, FACSs, MLS(ASCP)^{cm}

President of ASCLS

Sponsored by: College of American Pathologists

Contact Hours: 1.0

Level: Intermediate

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. 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.

Program Objectives:

1. Describe the trends that have major implications for the future of healthcare.
2. Explain how the listed trends may affect the healthcare careers in the future
3. Evaluate possible approaches in preparing skillful workforce

Session #2 12:15 – 1:15 pm

Scientific Assembly Roundtable Luncheon

Contact Hours: 1.0

Level: Intermediate

These informal round table presentations and discussions will center on issues that are recently impacting laboratory practice in the represented area of knowledge. The facilitator will present at least one “Hot Topic” for discussion and lead the roundtable participants in a discussion about issues pertinent to their area of expertise. The group will brainstorm about possible solutions to problems and “best practices” will be shared:

Choose one to attend:

1. Management: Robyn Sorrell, Facilitator
2. Microbiology: Rodney Rohde, Facilitator
3. Hematology: George Fritsma, Facilitator
4. Immunohematology: Jennifer Wolcott, Facilitator
5. Chemistry: Jed Doxtater, Facilitator

Program Objectives:

1. Summarize the findings represented in one roundtable presentation
2. Discuss 2 ideas discussed in the roundtable presentations that will help the participant perform his/her job more effectively.

*****Networking Break 1:15pm-1:30pm*****

★★★ BREAKOUT SESSIONS 1:30pm-2:30pm ★★★

Session #3 - Digital Cell Morphology with Esoteric Case Studies

◆ Scott Dunbar, MS, BS

Sponsored by: Cellavision

Contact Hours: 1.0

Level: Basic

The speaker will detail how digital cell morphology can help standardize a very subjective area of laboratory testing using esoteric case studies and live software demonstrations.

Program Objectives:

1. Describe how neural networks help standardize morphology
2. Discuss remote review software to improve turnaround time
3. Practice esoteric case studies for teaching

Session #4 - COVID-19 Challenge: Setting up a High Complexity Molecular Lab in a rural Hospital during the Pandemic.

◆ Hannah Mirrashed, PhD, DCLS(ASCP)

Sponsored by: Quidel

Contact Hours: 1.0

Level: Basic

After establishing a COVID Lab in 2020, we have provided a safe, fast and convenient COVID-19 testing to our community and the surrounding areas. Plumas District Hospital is a rural and critical access hospital with 16 beds in Quincy, California. By opening the COVID lab, PDH quickly supported by local public Health, Schools, Colleges, Fire Departments, Correctional facility, U.S. Forest Service and nearby hospitals for COVID testing.

PDH lab has established six significant objectives for the community:

1. Ensuring patient safety in patient management
2. Community surveillance by helping the community return to work and school safely
3. Keep open the hospital departments offering tests for patients and increasing number of the patient by 10%.
4. Increase revenue, especially from elective procedures and Laboratory in-house testing
5. Providing a significant support to Plumas county Public Health department for Covid-19 testing and vaccination.
6. In addition, opening the COVID lab moved the PDH lab faster to a Molecular testing level in whole.

Program Objectives:

1. Describe how neural networks help standardize morphology
2. Discuss remote review software to improve turnaround time
3. Practice esoteric case studies for teaching

Session #5 - Waiter There's a Double-Chromatin Dot in My Plasmodium Vivax Specimen. Or, Avoiding Dogmatism in Identifying Blood Parasites

◆ Blaine A. Mathison, BS, M(ASCP)

Sponsored by: ARUP Laboratories

Contact Hours: 1.0

Level: Intermediate

Outside of large reference laboratories, blood parasites are rarely seen in clinical diagnostic laboratories. As such, it can be difficult for laboratorians to maintain confidence in identifying blood parasites. This often leads to getting caught in dogmatic pitfalls which may result in misidentifications that could have clinical significance. Presentation will include overview of blood parasites, focusing on key elements to consider when identifying them, with an emphasis on common dogmatic pitfalls that occur with Plasmodium identification. The goal is to present an approach to blood parasite identification with a 'big picture' viewpoint, and to avoid pitfalls that may lead to misidentifications.

Program Objectives:

1. Describe the morphologic features of Plasmodium that are important for a reliable diagnosis
2. Describe how to morphologically separate species of human trypanosomes
3. List important criteria for the identification of microfilariae

*****Networking Break 2:30pm-2:45pm*****

★★★ BREAKOUT SESSIONS 2:45pm-3:45pm ★★★

Session #6 - TMA, TTP, aHUS, STEC-HUS, PLEX, TIC, ADAMTS13, VWF. What Does it All Mean?

◆ George A. Fritsma, MS, MLS

Contact Hours: 1.0

Level: Intermediate

Normal von Willebrand factor supports platelet adhesion, but functional VWF abnormalities and ADAMTS13 deficiency are implicated in thrombotic thrombocytopenic purpura, trauma-induced coagulopathy, arterial thrombosis and SARS-CoV2 infection. Other mechanisms trigger HUS. Help is on the way, not only plasma exchange and vintage factor concentrates, but we also now have caplacizumab, eculizumab, and ADAMTS13 concentrate. Let's sort this out in one hour.

Program Objectives:

1. Diagram VWF production and the von Willebrand factor cleaving protease, ADAMTS13.
2. Diagram the mechanisms behind the thrombotic microangiopathies STEC-HUS and aHUS.
3. Illustrate how these disorders are implicated in arterial thrombosis, TTP, and SARS-CoV2 infection.
4. Identify and manage the emerging therapies eculizumab, caplacizumab, and ADAMTS13 concentrate

Session #7 - Manual versus Automated ABO and non-ABO Antibody Titration

◆ Amanda Barzak, MLS(ASCP)

Sponsored by: Immucor

Contact Hours: 1.0

Level: Intermediate

A comparison of titer strength and reproducibility of both ABO and non-ABO antibody titrations. Our lab evaluated performing these tests using our current method which is a single tube dilution for ABO for the purposes of producing low titer type O whole blood and serial dilution for non-ABO antibodies. These were compared to utilizing the Immucor Iris assays.

Program Objectives:

1. Describe the purpose of ABO and non-ABO antibody titration testing
2. Understand the differences between manual and automated antibody titration methodologies
3. Understand the validation process for bringing on automated titration testing

Session #8 - From Guatemala to Garage—Surviving Lab Work in Creative Ways

◆ Jon Windsor, MPH, MLS(ASCP)

Contact Hours: 1.0

Level: Intermediate

Doing laboratory work in a traditional or clinical setting is fun; but what if you could do it in other environments? Jon shares stories from his time working in the academic sector and a global health setting. Including when he processed COVID-19 samples in his garage...

Program Objectives:

1. Discuss the unique challenges of laboratory work in a global health setting
2. Describe fun ways to use your laboratory training outside a traditional setting
3. Explain the importance of Good Clinical Laboratory Practice (GCLP) Standards

*****Networking Break 3:45pm-4:00pm*****

General Session #9 4:00pm -- 5:00pm

Career Options in Forensic Science with an MLS degree

◆ Tina Mattox, F-ABC, MLS

Contact Hours: 1.0

Level: Intermediate

A review of the laboratory positions available at the Idaho State Police forensic services laboratories, what the educational requirements are, examples of case work, duties and responsibilities in the different sections of the lab.

Program Objectives:

1. Describe the different areas of the forensic laboratory.
2. Compare the similarities and differences in working in a crime lab v. hospital lab.
3. Explain how having an education in Medical Laboratory Science can be versatile with the jobs available

*****SOCIAL 5:30pm-8:00pm*****

Come enjoy appetizers, drinks, and try your luck at our 2021 Casino Royale! We will have a number of different games at this event ranging from poker to blackjack 21. No previous poker or card shark experience required! We have games for all ages! Tickets will be given to play each game with your Social admission. Each time you win you get all the tickets from your opponents. When you run out of tickets you can buy more to benefit our silent auction charity or you can just enjoy the festivities! The winner with the most tickets/wins at the end of the night wins a prize!

END OF DAY 1

MONDAY, OCTOBER 4, 2021

General Session #10 8:30am – 9:30 am

KEYNOTE - Resilience: Turning Crisis into Opportunity

◆ Hassan A. Aziz, PhD, FACCS, MLS(ASCP)^{cm}

President of ASCLS
Contact Hours: 1.0

Level: Intermediate

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.

Program Objectives:

1. Describe the different areas of the forensic laboratory.
2. Compare the similarities and differences in working in a crime lab v. hospital lab.
3. Explain how having an education in Medical Laboratory Science can be versatile with the jobs available

*****Networking Break 9:30am-9:45am*****

General Session #11 9:45am – 10:45am

Be THE Expert: A Pandemic Opportunity!

◆ Rodney Rohde, PhD, SV(ASCP)^{cm}, SM^{cm}, MB^{cm}, FACSc

Contact hours: 1.0

The speaker will discuss his experience with his role as a global subject matter expert during the SARS-CoV-2 / COVID-19 pandemic. During the pandemic, I have given 130+ interviews and podcasts, published 20 invited articles, and presented 25 webinars / presentations in leading state, national, and international venues. Quoted in dozens of outlets over 60+ countries, I will discuss how to leverage our expertise to raise our visibility.

Program Objectives:

1. Discuss how to leverage one's medical laboratory expertise at the international and national level during public health and / or healthcare emergencies.
2. Identify effective strategies to synergize one's expertise in social media channels and other digital media, including interviews.
3. Summarize how to create explainer articles for science communication and health literacy while raising the visibility of our profession for the public.

*****Lunch with exhibitors 11:00am-1:30pm*****

General Session #12 1:30pm – 2:30pm

Creative Thinking and Problem Solving

◆ Michele Fisher, MT(ASCP) ASQ, CLSSGB

Contact hours: 1.0

Level: Basic

Problem solving has traditionally focused on constraining human behaviors to optimize system performance, but inhibiting behavior has the unwanted side effect of inhibiting creativity and innovation as well. In today's complex and ever-changing environment, stifling creativity and innovation are dangerous strategies. Creative Problem Solving will explore methods for solving problems with creativity while accounting for human limitations and explore reasons that innovation can be challenging. Methods for stimulating new ideas while maintaining order and stability in the laboratory setting will be presented. Cycles of innovation and stabilization will be key to surviving in the current healthcare environment.

Program Objectives:

1. Discuss problem solving skills
2. Describe methods for creative problem solving
3. Apply methods of creative problem solving to the laboratory environment

★★★ BREAKOUT SESSIONS 2:45pm-3:45pm ★★★

Session #13 - Hemoglobin A1c Testing. Is "Good Enough" Acceptable for Your Laboratory?

◆ Dan Cavalancia, Sr., BS

Sponsored by: Bio-Rad

Contact Hours: 1.0

Level: Intermediate

Question: "How do you feel about your method for A1c testing?"

Lab Response: "It is FDA approved, NGSP certified, Quality Control is great with no Proficiency failures. We are good".

Consideration: But are you certain that it is "good enough"?

In this presentation, we will dig a little deeper into the methodology differences, key in on some common interferences and how to avoid the cost of an inaccurate Hemoglobin A1c result.

Program Objectives:

1. Differentiate between methodologies for A1c testing, along with the Pro's and the Cons of each.
2. Identify key factors when selecting an A1c method, the "must haves" and the "definitely do not want".
3. Discuss avoiding the cost of an inaccurate A1c result with Prevention, Appraisal and Failure review

Session #14 - Antimicrobial Resistance Threats

◆ Jean Patel, PhD, D(ABMM)

Sponsored by: Beckman-Coulter

Contact Hours: 1.0

Level: Intermediate

We will discuss the changing epidemiology of MDRO infections and future treatment options for these infections.

Program Objectives:

1. Describe the epidemiology of the most important antibiotic resistant bacteria
2. Identify antibiotics that are used to treat infections caused by antibiotic resistant bacteria
3. Explain strengths and weaknesses of antibiotics in development

Session #15 - TBA

◆ Dr. Plumier

Sponsored by: Billings Clinic

Contact Hours: 1.0

Level: Intermediate

Program Objectives:

1. TBA

★★★ BREAKOUT SESSIONS 4:00pm-5:00pm ★★★

Session #16 - The Pathophysiology of COVID-19 Associated Coagulopathy

John Mitsios, PhD

Sponsored by: Siemens

Contact Hours: 1.0

Level: Advanced

The focus of this presentation will be to explore the pathophysiology of COVID-19-associated coagulopathy and how the thromboinflammatory response (e.g., cytokine storm) contributes to severe coagulation abnormalities in COVID-19 patients. In addition, this presentation will also explore the potential mechanisms and laboratory parameters/markers that are helpful in guiding the management/monitoring of COVID-19 patients

Program Objectives:

1. Describe the effects of SAR-CoV2 (COVID-19) on the host.
2. Describe the pathophysiology of COVID-19 associated coagulopathy
3. Describe the most commonly ordered tests in COVID-19 and how to interpret the results in the context of COVID-19.

Session #17 - Biomarkers in Alzheimer's disease

Chris Stamatkin, PhD

Sponsored by: Roche

Contact Hours: 1.0

Level: Intermediate

This session will present an overview and discussion of the impact of biomarker testing in Alzheimer's disease.

Program Objectives:

1. Discuss aspects of Alzheimer's Disease to include pathophysiology and disease burden
2. Describe current challenges with AD diagnosis and unmet need
3. Summarize current biomarkers in development, including impact on diagnosis and treatment.

Session #18 - The Invisible Enemy: Congenital CMV Infections in the US

Sarah Elliott, PhD

Sponsored by: DiaSorin Molecular

Contact Hours: 1.0

Level: Basic

Congenital CMV infections affect more children each year than all the common conditions tested for during newborn screening combined, and yet public awareness remains low. This seminar will shed light on the prevalence, epidemiology, and clinical guidelines associated with congenital CMV infections, as well as available testing options for diagnosis

Program Objectives:

1. Describe the general biology of human herpesviruses and the viral life-cycle of CMV
2. Summarize the prevalence, disease manifestations, treatment and management of congenital CMV infections
3. Identify the current clinical guidelines and laboratory methods used to diagnose congenital CMV infections

THE IMSS SILENT AUCTION

Please join the vendors and your peers at the IMSS "I'm all in" Silent Auction on Monday evening, October 4, 2021, running from 5:00 pm - 7:00 pm at the Snow King Resort! Proceeds benefit both the Teton Free Clinic in Jackson and the Region VIII Leadership Academy. You can "go all in" by first donating valuable items you have lying around your house and office. Secondly, come and competitively bid on items, you might just get lucky...bid high and bid often!

END OF DAY 2

TUESDAY, OCTOBER 5, 2021

General Session #19 8:00am – 9:00am

Admiral Nelson and Zulus What Do They Have in Common?

◆ Jewell Taylor-Zweegman, LMT, MR

Sponsored by: Billings Clinic

Contact hours: 1.0

Level: Basic

Admiral Horatio Nelson and African Zulus? They have something in common that will surprise you. Each helped others better themselves and to think outside the box for success and personal achievement.

Program Objectives:

1. Describe how a person can grow from decisions good or bad.
2. Develop a plan on how to see the good out of a bad situation.
3. Discuss skills gained on mapping out a person's life journey.

*****Networking Break 9:00am-9:15am*****

★★★ BREAKOUT SESSIONS 9:15am-10:15am ★★★

Session #20 - Liver Fibrosis

◆ Melanie Pollan, PhD, MT(ASCP)

Sponsored by: Siemens

Contact Hours: 1.0

Level: Intermediate

The WHO estimates that > 1 billion individuals are at risk for chronic liver disease, and the prevalence of NAFLD (non-alcoholic fatty liver disease) is between 30-40% for adults in the US. With intervention and treatment, fibrosis can be reversed, but identification of disease is often coupled with a hospitalization or liver-related health event. By taking advantage of new testing algorithms and non-invasive tests offered by the laboratory, identification and intervention may be better facilitated to reduce the growing burden on the healthcare system.

Program Objectives:

1. Define the stages of liver disease progression
2. Identify common techniques for diagnosis of chronic liver disease
3. Discuss the utility of non-invasive test methods for detection of liver disease

Session #21 - New Approaches to Myeloma Screening and Monitoring

◆ Dr. Thomas Lohmann, MD

Sponsored by: Sebia

Contact Hours: 1.0

Level: Intermediate

This session will be a discussion of new methods for detection of MGUS and/or Myeloma, and new approaches to monitoring effectiveness of treatment.

Program Objectives:

1. Discuss methods to detect monoclonal protein in patients.
2. Outline risk factors for accelerated progression of MGUS.
3. Discuss the role of mass spectrometry in screening for MGUS

Session #22 - The Evolution of Phlebotomy

◆ Erin Peper, MS, PBT(ASCP)

Sponsored by: Mayo Clinic
Contact Hours: 1.0

Level: Basic

Have you ever wondered how we came from bloodletting and leeches to present day phlebotomy? This presentation is going to walk you through the history and what has led us to some of the advancements in the field of phlebotomy including safety and regulations.

Program Objectives:

1. Describe the introduction of safety devices on venipuncture equipment.
2. Discuss some of the regulatory agencies, certifying bodies and standard practices associated with phlebotomy.
3. Share how phlebotomy has benefitted from advancements in medicine.

******ASCLS Updates, Legislative Updates, Awards 10:15am-11:15am******

******Lunch with exhibitors 11:15am-1:15pm******

★★★ BREAKOUT SESSIONS 1:30pm-2:30pm ★★★

Session #23 - *When Schistocytes Hit the Fan: Clinical Implications of Schistocytes in Peripheral Blood Smears*

◆ Angela Durden, MD, FCAP

Sponsored by: Yellowstone Pathology Institute

Contact Hours: 1.0

Level: Intermediate

An uneventful shift in Hematology is drawing to a close as you review a peripheral smear, when suddenly, your shift becomes a little more interesting..."Are those schistocytes? Oh my!" This session will explore how schistocytes form, why recognizing and reporting their presence is important, and the various clinical conditions associated with schistocyte formation..

Program Objectives:

1. Confidently identify schistocytes in peripheral blood smears and appropriately refer such smears for pathologist review.
2. Recall the mechanism of schistocyte formation and its clinical significance.
3. Explore clinical and laboratory scenarios in which schistocytes occur.

Session #24 - *Coronavirus and the Kidneys: Electrolyte Abnormalities, AKI, and CKD in COVID-19*

◆ Dennis Begos, MD, FACS

Sponsored by: Nova Biomedical

Contact Hours: 1.0

Level: Intermediate

The session will discuss the impact of COVID-19 as it relates to electrolyte homeostasis and kidney function. We will describe the common electrolyte abnormalities and their significance in COVID-19. The attendee will understand the prognostic importance of closely monitoring electrolytes, specifically Na, K, Mg, and Ca in patients with COVID-19. We will discuss the common finding of acute kidney injury (AKI) in COVID-19 patients, its pathophysiology, and strategies to manage it in the acute care setting. We will also touch on COVID-19 and its impact in patients with pre-existing kidney disease including those on dialysis, and those with renal transplants.

Program Objectives:

1. Identify common electrolyte abnormalities and their significance in COVID-19
2. Discuss the impact of acute kidney injury in COVID-19
3. Explain the significance of COVID-19 in patients with chronic kidney disease

Session #25 - *A REAL Discussion About POC Upper Respiratory Testing and Microbiology*

◆ Joel Mortensen, PhD, FAAM, HCLD

Sponsored by: Abbott
Contact Hours: 1.0

Level: Intermediate

Dr. Joel Mortensen, Director of the Diagnostic Infectious Diseases Testing Laboratory, and clinical virologist from Cincinnati Children's Hospital Medical Center, will provide an engaging and practical assessment of rapid, point-of-care testing for upper respiratory infections across an entire health system. This is an ideal session for understanding rapid, molecular POCT.

Program Objectives:

1. Characterize upper respiratory diagnostic terminology and associated POCT devices
2. Discuss the evaluation and implementation of POCT devices
3. Discuss the potential impact of POCT on patient care, workflow and resources

General Session #26 2:45pm – 3:45pm

Closing Keynote - Quality Management for Your Life

Lucia Berte, MA, MT(ASCP), SBB, DLM, CQA(ASQ), CMQ/OE

Contact hours: 1.0

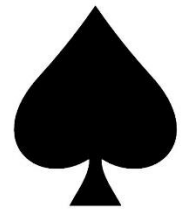
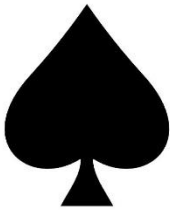
Level: Intermediate

A quality management system for laboratory services has been published that has a foundation of 12 basic building blocks of quality. In the laboratory environment we know equipment maintenance, document management, and inventory control. But what happens when you apply these same requirements to your personal life? Come see!

Program Objectives:

1. Briefly describe the 12 Quality System Essentials (QSEs) of a basic quality management system.
2. Explain how the QSEs can be applied to your personal activities for a more organized and less stressful life.
3. List at least 5 examples of where you can apply the QSEs in your life.

END OF CONFERENCE
(Thanks for playing!)





Key Players in IMSS 2021 (SPEAKER BIOGRAPHIES)



Hassan Aziz is the Dean of the College of Nursing and Health Sciences at Texas A&M University – Corpus Christi. Dr. Aziz is the current President for the American Society for Clinical Laboratory Science (ASCLS). He is a Fellow of the Association of Clinical Scientists (ACS) and of the Institute of Higher Education at the University of Georgia (UGA). He is a certified Green Belt Six Sigma and TEDx speaker. Aziz has an extensive international experience in higher education, consulting and advisory work. He is an external examiner for several international academic programs and an adjunct faculty to a number of institutions. He is an active member of national and international professional and scientific societies and organizations. He represents ASCLS at the International Federation of Biomedical Laboratory Science (IFBLS) and he is a member of its Scientific Network of Experts. He is currently the Chair of the CLEC 2021 Steering Committee. He founded the Qatar Advisory Board of the American Society for Clinical Pathology (ASCP) in 2013 and is a mentor and a consultant for the ASCP Global Outreach Program. He is a VIP mentor to new program directors through the National Accrediting Agency for Clinical Laboratory Science (NAACLS) as well as a site visitor for clinical laboratory programs. In addition to numerous international conference presentations and guest speaking engagements, Dr. Aziz has over 75 peer-reviewed publications. In 2019, he was the recipient of the prestigious ASCP Lifetime Achievement Award and the Distinguished Author Award by ASCLS. He is a consulting editor for Clinical Laboratory Science (CLS) published by ASCLS, and on the Development Board of Critical Values published by ASCP.



Scott Dunbar has been working in hematology sales for 24 years. Prior to this, he worked at the University of Colorado in the bone marrow transplant lab. He likes to travel and play ice hockey



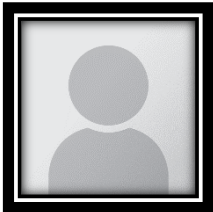
Hannah Mirrashed is currently a clinical laboratory director at Plumas District Hospital in Quincy, California. She received her Ph.D. in Molecular Biology and Genetic on new antimicrobial drug discovery, her M.Sc in Genetic on developing genetic biomarkers and her B.Sc. in Microbiology. Dr. Mirrashed received two fellowships from Canadian Government and Ministry Research Innovation for NanoBio Technology and later Canadian National Science Engineering Research Council supported her research in Nutrigenomic study on Medicinal compounds. In 2012, she moved to southern California working as a research Manager and Lead Scientist at Western University dedicated to the clinical research and testing on biomedical devices and rare disease indications. Her knowledge and research background in Science and Clinical testing helped her in setting up 3 laboratories in Canada and USA. Her outstanding abilities are well recognized in the field. Her work has been published in numerous peer-reviewed journals. She is also frequently honored with awards for research in clinical study and molecular science, training skills and more importantly for her leadership, management skills and her scientific innovation in health care.



Blaine Mathison is currently a Scientist in the Institute for Clinical and Experimental Pathology at ARUP Laboratories in Salt Lake City. Mr. Mathison has been studying Parasitology for over 20 years, including working at the Institute of Parasitology at the Czech Academy of Sciences, Czech Republic, the Arizona State Health Department, and the CDC, where he managed the DPDx website for nine years. He has published extensively on Parasitology and Entomology, the latter of which is also a personal hobby.



George Fritsma has managed his blog, The Fritsma Factor, since 2007. He consults for the Laboratory Medicine Division of the University of Alabama at Birmingham School of Medicine and is an Associate Professor on the faculty of Michigan State University. George is a consulting editor for the Clinical Laboratory Science journal and contributing author for Rodak's Hematology, Elsevier, published 2020. He is also scientific advisor for Inflammatory Markers Laboratory, Inc., Precision BioLogic Inc, and BioMedica Diagnostics, Inc. George holds a Bachelor of Science degree in biology and chemistry from Calvin University, a Masters in Medical Laboratory Science from Wayne State University, and advanced course work from the University of Illinois at Chicago.

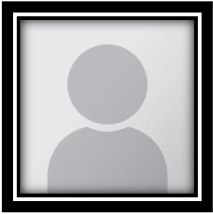


Amanda Barzak is the supervisor of Transfusion Services at Poudre Valley Hospital where she has been since 2012. Amanda oversees the final review and distribution of blood products produced by the Garth Englund Donor Center.



Jon Windsor is both a medical laboratory scientist and epidemiologist for the University of Colorado Center for Global Health and their collaborators. He works on a variety of projects related to infectious diseases and diagnostics for funders such as the WHO, UNICEF, and Gates foundation while serving as a bridge between the laboratory and epidemiology disciplines.





Tina Mattox is a Forensic Scientist with the Idaho State Police. She is a full-time drug chemist and crime scene responder.

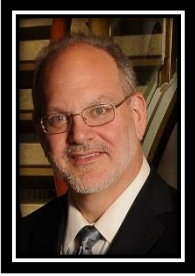


Rodney Rohde is a University Distinguished Professor and Chair for the Clinical Laboratory Science (CLS) Program in the College of Health Professions at Texas State University. He also serves as Associate Director for the Translational Health Research Center. Dr. Rohde is a Global Fellow, Fellow of the Association of Clinical Scientists, and Honorary Professor of International studies. He is an ASCP board certified Specialist in Virology, Microbiology and Molecular Biology. He spent a decade as a public health microbiologist and molecular epidemiologist with the Texas Department of State Health Services (DSHS) Bureau of Laboratories and Zoonosis Control Division prior to his academic career, including two terms as a CDC Visiting Scientist. Dr. Rohde served as Associate Dean for Research in the College of Health Professions for nine years. His research interests include Healthcare Associated Infections (HAIs), antimicrobial resistance, and clinical / public health microbiology especially zoonotic diseases (Rabies, Hantavirus, and others). Dr. Rohde has published over 75 research articles and abstracts, two books and is a highly sought keynote presenter with over 100 international, national, and state conference presentations. His two books focus on Methicillin Resistant Staphylococcus aureus (MRSA) adaptation and Clinical Considerations in Rabies, respectively. In recent years, he has become a globally viral author subject matter expert utilizing invited articles, TEDx talks, podcasts, video casts and interviews to enhance science communication and translational health research literacy in public health, healthcare and the medical laboratory environment. During the #SARSCoV2 / #COVID19 pandemic, Doc R is the #1 quoted Texas State subject matter expert and has conducted over 130 interviews for podcasts, TV, newspapers, and internet sites as well as delivered dozens of webinars and workshops at the international, national, state, and local levels. He has received numerous awards and honors during his career, and most recently, added to The Pathologist's PowerList 2020 (global award).



Michele Fisher is an Improvement Specialist at ARUP Laboratories and has worked in quality systems at ARUP for over 24 years. In addition, Michele has worked and taught as a registered Medical Technologist for 17 years in laboratory disciplines including Transfusion Medicine, Immunology, Chemistry, and Hematology. She has served as the compliance coordinator and quality specialist for Transfusion Medicine and served on the ARUP Continuous Quality Improvement Board. Michele has served on the board of the local UAHQ chapter as the Education Council Co-chair. Currently, Michele is active in continual improvement instruction and mentoring continual improvement projects at ARUP





Dan Cavalancia is a graduate from the University of Akron with over 35 years' experience in Diabetes and Drug monitoring. His experience includes HPLC, GC and TLC. The last 31 years Dan has been working for Bio-Rad Laboratories ranging from roles of Account Executive, Regional Manager and National Account Management. Dan works with the US team in the Public Health sector and specialize at Bio-Rad in HPLC in fields of A1c, Beta Thalassemia and Newborn screening. He resides in Ohio with his wife Lori of 37 years.



Jean Patel joined Beckman Coulter Microbiology after nearly seventeen years at the Center for Disease Control (CDC) in the Antimicrobial Resistance Reference Laboratory and the Office of Antimicrobial Resistance. Prior to that, she was the Assistant Professor of Pathology and Laboratory Medicine, and the Assistant Director of Clinical Microbiology at the University of Pennsylvania. Dr. Patel is known worldwide for her expertise and publications in the area of antimicrobial susceptibility testing. She has held many roles with the Clinical Laboratory and Standards Institute (CLSI), including the Chairholder of the Subcommittee for Antimicrobial Susceptibility Testing.



Luke Plumier grew up in rural Illinois and attended medical school near his hometown at the University Of Illinois College Of Medicine at Peoria. Upon graduation he moved out west, completing his residency in anatomic and clinical pathology at the University Of Colorado School Of Medicine. He then pursued further subspecialty training in both surgical pathology at the University of Washington and Blood Banking/Transfusion Medicine at Dartmouth-Hitchcock Medical Center. He joined Billings Clinic in 2019 and currently serves as the Medical Director of the Billings Clinic Blood Bank/Transfusion Medicine service. True to his rural roots he also serves as medical director for hospital laboratories across Montana, including Central Montana Medical Center, Glendive Medical Center, and Livingston HealthCare. He has a passion for patient safety and blood supply stewardship and is excited to have the opportunity to speak with you today.



John Mitsios is a clinical consultant in the Scientific and Clinical Affairs team at Siemens Healthineers. His primary research interest throughout his education and training has been in coagulation, with an emphasis on platelet function and biology. Dr. Mitsios was on the faculty at Weill Cornell University as an Assistant professor of Pathology and Laboratory Medicine, as well as Assistant Attending Clinical Chemist at New York-Presbyterian Hospital. He was Assistant Director of the Special Coagulation Laboratory at BioReference Laboratories, overseeing the day-to-day activities of the lab and signing out clinical hemostasis cases



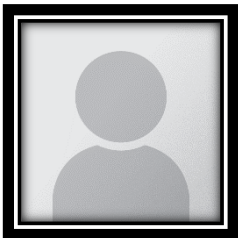
Chris Stamatkin currently serves as a Scientific Affairs Manager at Roche Diagnostics. He earned his doctoral degree in Pharmaceutical Sciences from University of Kentucky's College of Pharmacy. Prior to joining Roche, he has held positions such as lead staff scientist at Covance laboratories, in the immunoassay and special chemistry group, and as assistant research professor at the Indiana University School of Medicine. Today, he is here to present on the topic of Biomarkers in Alzheimer's Disease.



Sarah Elliott completed her PhD in Microbiology and Immunology with a focus on Molecular Biology at the University of Minnesota. After completion of her PhD work, Dr. Elliott joined DiaSorin as an Infectious Disease Specialist in 2017. In this role Dr. Elliott was the subject matter expert for the serology-based infectious disease assays. In 2019, Dr. Elliott transitioned to DiaSorin Molecular as a Senior Scientist in the Scientific Affairs team.



Jewell Zweegman is a favorite at IMSS. She brings enthusiasm and excitement wherever she goes and always has great tidbits of wisdom to pass along. Jewell wears many hats and is not only a business owner and customer service guru, but she is also a licensed massage therapist, master reflexologist, a nationally certified weight loss specialist AND has over 19 years' experience as a professional speaker. WHEW! In Jewell's spare time, she enjoys spending time with her family, doing crafts, and enjoying a trip or two.



Melanie Pollan is the Senior Director of Scientific & Clinical Consulting for Laboratory Diagnostics in North America and she also serves as the North American Collaborations Manager. Dr. Pollan began her career more than 20 years ago with a BS in Clinical Laboratory Science, and served the laboratory in several roles including technologist, consultant and administrator. She furthered her studies by pursuing both a Master of Science and a Doctor of Philosophy in Clinical Health Science at the University Of MS Medical Center with an emphasis in pathophysiology. Dr. Pollan demonstrates her

passion for laboratory medicine on a daily basis by supporting laboratorians and clinicians with education in multiple diagnostic disciplines, including cardiac, liver, infectious disease, diabetes, sepsis, and endocrinology. During the past year she has also been involved in the development of both antigen and serology assays for the detection of COVID-19 infection.





Thomas Lohmann has practiced pathology for over 35 years, directing academic and commercial laboratories. He now directs the medical and scientific group for Sebia-USA.



Erin Peper has been working in the field of Phlebotomy for almost 18 years. She started as an inpatient and outpatient technician, spent 11 years as an Assistant Supervisor of multiple outpatient phlebotomy labs and the last 3 years in Phlebotomy Education as the Associate Program Director and now Program Director of the Mayo Clinic School of Health Science Phlebotomy Technician Program with programs running in Rochester, Minnesota, Jacksonville, Florida and coming soon to Phoenix, Arizona.



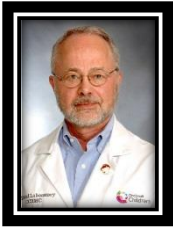
Angela Durden is a pathologist at Yellowstone Pathology Institute (YPI) in Billings, Montana, where she has worked since 2009. She earned her medical doctorate from Louisiana State University Health Sciences Center in Shreveport and completed her residency training in Anatomic and Clinical Pathology at the Medical University of South Carolina in Charleston. Upon completion of her residency, she completed a fellowship in gastrointestinal and hepatobiliary pathology in Memphis, Tennessee. Dr. Durden

currently serves as the President and laboratory medical director of YPI and as the laboratory medical director of St. Vincent Healthcare laboratory and Cancer Centers of Montana (St. Vincent) laboratory. In her spare time, she enjoys spending time with her husband and two children, gardening, hiking, traveling, and being a couch potato with her two cats.



Dennis Begos was a practicing surgeon for over 20 years prior to joining Nova. He currently works in the medical and scientific affairs department as a director. He brings his clinical experience and industry experience to deliver a unique perspective on this topic.





Joel Mortensen is Director of the Diagnostic Diseases Testing Laboratory at Cincinnati Children's Hospital Medical Center. He is a Professor of Pathology and Laboratory Medicine and has collaborated on more than 100 peer-reviewed publications, case studies and book chapters. He holds numerous positions on hospital committees, national and professional boards and has been a frequent invited speaker at scientific conferences and other educational forums. His interests include rapid testing in the lab and outpatient settings and applying his LEAN manufacturing processes training to clinical microbiology.



Lucia Berte has worked for over 25 years as a trainer and consultant in laboratory quality management systems in the U.S., Canada, and many countries worldwide. She served as a key developer of the American Association of Blood Banks and Clinical and Laboratory Standards Institute QSE-based model for quality management in laboratories and blood banks, along with the supporting educational materials and programs. She has also been a member of the writing teams for the international medical laboratory standard ISO 15189:2012 and the current revision. Luci has written over 50 papers and at least 13 books and chapters on laboratory quality management. She has given numerous presentations at local, state, provincial, national, and international meetings plus many audio conferences and webinars.

