
## *"Spring Symposium" - April 25-26, 2022*

## *Hot Topic Education, Professional Updates, Networking & FUN*

***American Society for Clinical Laboratory Science - North Dakota***

### *SPRING SYMPOSIUM VALUE, BENEFITS & HIGHLIGHTS*

- *Time to **Reflect** on what has transpired for the laboratory since our last State Meeting in 2019*
- *Time to **Reset** by meeting together and touching base with all our fellow laboratorians*
- *Time to **Recharge** ourselves with great speakers, great vendor opportunities and normalcy*
- *ASCLS-ND is approved as a provider of continuing education programs in the clinical laboratory sciences through the ASCLS P.A.C.E. program.*
- *P.A.C.E credits will be awarded for sessions attended.*

| *Session Info* | *Session Description/Speakers/Objectives/Level of Instruction/Contact Hours* | *PACE #* |
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| ***8:00-8:30am – Light Breakfast***<br><br>*K1 – Keynote 1*<br><br>*4/25/2022*<br>*8:30-9:30am*<br><br>*Embassy Royale* | *Self-Care and Stress Management Strategies for Healthcare Professionals*<br>*Speakers: Andrea Doyen, NDSU Graduate Intern;*<br>*Anna Nguyen, NDSU Graduate Intern*<br>*In the wake of Covid-19 and the continued global health crisis, healthcare professionals are feeling more burned out than ever resulting in physical as well as mental health issues. Skills for self-care and stress management are crucial to providing exemplary patient care. This presentation will discuss barriers to self-care and strategies for implementing stress management strategies.*<br><br>*Objectives:*<br>1. *List the barriers to self-care and the impacts of burnout for healthcare professionals*<br>2. *Critically reflect on current self-care practices or lack thereof*<br>3. *Implement valuable skills for self-care practices*<br>*Level of instruction: BASIC*<br>*Contact Hours: 1.0* | |
| *S1 – Session 1*<br>*4/25/2022* | *Pandemics…Epidemics…Endemics…and The Wild Ride of Laboratory Safety* | |

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| *S1 – Session 1 (CONT.)*<br><br>*4/25/2022 9:45-10:45am*<br><br>*Executive* | *Speaker: Linda Gylland, MLS (ASCP)$^{cm}$, QLS $^{cm}$*<br>*Pandemics → epidemics→ endemics through the years have been impacted with the changing roles of scientists and medical professionals and the evolution of laboratory safety. The fact that ASCP is celebrating 100 years this year, founded shortly after the Spanish Flu pandemic, ties in well with this topic. How has COVID-19 been similar and different from the Spanish Flu and Ebola? What problems were a common thread among all labs? What have we learned? The news media has included laboratory updates and testing methods. How can we separate fact from fiction? This is the time to reset our goals, recharge our batteries and explain to others, especially those searching for careers, why we chose this fascinating profession!*<br><br>*Objectives:*<br>1. *Review significance of prior and current pandemics with laboratory involvement*<br>2. *Correlate a successful safety culture with the Hierarchy of Controls*<br>3. *Summarize safety measures we have learned from the COVID-19 Pandemic and action plans needed for emergencies*<br>4. *Describe how the timeline for safety organizations has made the 100$^{th}$ anniversary of ASCP reason to celebrate laboratorians and pathologists working together*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |
| *S2 – Session 2*<br><br>*4/25/2022 9:45-10:45am*<br><br>*Board* | *From the Lab to the Legislature*<br>*Speaker: Judy Lee, ND State Senator*<br>*Speaker will discuss skills learned in clinical laboratory careers moving into other career and life skills areas, as well a reviewing legislation affecting health care which was passed in 2021 and what is being discussed during the interim before the 2023 legislative session.*<br><br>*Objectives:*<br>1. *Apply the analytical skills learned in the laboratory to other areas of life, including other careers*<br>2. *Describe options available to as to how to be engaged in public life, whether as an advocate or candidate*<br>3. *Recognize the need for involvement in proposed legislation and how to testify to support, oppose, or recommend amendments*<br>4. *Identify laws affecting health care in the 2021 legislative session and what is now being discussed as proposals for the 2023 session*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |
| *S3 – Session 3*<br><br>*4/25/2022 11:00-11:59am*<br><br>*Executive* | *What is Happening with the Blood Supply?*<br>*Speaker: Jennifer Bredahl, MBA, Regional Director, Vitalant*<br>*Do you ever wonder why there always seems to be a need for more blood donors in North Dakota? This session will assist you to be able to discuss the importance of blood donation with both health care and non-healthcare professionals. It will also give you some insight to allow you to be a stronger advocate in promoting blood donation within your community.*<br><br>*Objectives:*<br>1. Discuss the importance of blood donations with other healthcare professionals and non-healthcare professionals<br>2. *Describe the blood donation process within ND in regard to collection, distribution, and maintenance of supply levels*<br>3. *List minimum qualifications to donate blood within ND to promote blood donations within their community*<br>4. *Describe barriers to maintaining blood supply within the region*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |
| *S4 – Session 4*<br><br>*4/25/2022 11:00-11:59am*<br><br>*Board* | *DCLS: Bridging the Gap in Diagnostic Management Teams*<br>*Speaker: Steph Jacobson M.S. MLS (ASCP)$^{CM}$, South Dakota State University, 3$^{rd}$ year DCLS Student*<br>*The Doctorate of Clinical Laboratory Science (DCLS) is an advance clinical practice provider degree that bridges the gap between providers, patients, and the laboratory. This presentation will highlight what a DCLS is, their role within a provider led DMT, and how a DCLS impacts patient care through case study examples from clinical residency.*<br>*Objectives:*<br>1. *Define DCLS and DMT* | |

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| *S4 – Session 4 (CONT.)* | 2. *Identify changes needed in the diagnostic process*<br>3. *Discuss the use of DMT's and clinical laboratory data to improve patient outcomes, test utilization, and reduce length of stay costs*<br>4. *Evaluate opportunities and models for the integration of the laboratory science professional into leadership roles both inside and outside of the traditional diagnostic laboratory*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |
| ***Luncheon – 12:00-12:30pm***<br><br>*K2 – Keynote 2*<br><br>*4/25/2022*<br>*12:30-1:30pm*<br><br>*Embassy Royale* | *Heroes in Lab Coats: What's Next?*<br>*Speaker: Cindy Johnson, M.S., MLS(ASCP)$^{CM}$ Senior Director, CentraCare Laboratory Services*<br>*We have been encouraged by ASCLS passionate past presidents to "Be the Face," "Promote the Profession," "Get Out of the Basement," "Share Your Passion," "Tell Your Story," and "Be Visible".*<br>*To illustrate how visibility can be integral to professional development, we will explore opportunities for heightened engagement and involvement—not only within the laboratory, but as proud members of the health care team.*<br><br>*Objectives:*<br>1. ***Reflect:*** *Explain the role that laboratory professionals played over the past two years during the pandemic.*<br>2. ***Reset:*** *Discuss effective culture strategies and tools that drive personal and professional engagement.*<br>3. ***Recharge:*** *Recognize our individual purpose and how collectively we can advocate for our profession.*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S5 – Session 5*<br><br>*4/25/2022*<br><br>*1:45-2:45pm*<br><br>*Executive* | *Hematologic Malignancy Mutations*<br>*Speaker: Mary Coleman, Assistant Professor, University of North Dakota Department of Medical Laboratory Science*<br>*In the last 30 years, the field of hematopathology has undergone several revolutionary periods, including the development of a classification system defining distinct, real entities, as outlined in the WHO classification of hematologic neoplasms, advances in sophisticated immunophenotyping such as flow cytometry, and most recently an explosion in molecular/genetic testing that greatly expands how we understand the pathophysiology of hematologic disease. Some of these advances in hematologic malignancy diagnosis will be discussed.*<br><br>*Objectives:*<br>1. *Recognize some of the more common hematologic malignancy mutations*<br>2. *Correlate various mutations with specific hematologic malignancies*<br>3. *Outline the complexity of specific hematologic malignancies*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S6 – Session 6*<br><br>*4/25/2022*<br><br>*1:45-2:45pm*<br><br>*Board* | *"And Now We Know": Lessons from establishing North Dakota's first cellular therapy lab*<br>*Speaker: Nicholas Gau, MD, MT(ASCP), Sanford Health*<br>*This presentation will briefly discuss the field of cellular therapy, autologous bone marrow transplantation, and laboratory processing of autologous stem cells. The main focus of the presentation is on the many challenges, successes, and lessons learned by Sanford Laboratories in establishing a brand new cellular therapy laboratory and bone marrow transplant program in Fargo, ND.*<br><br>*Objectives:*<br>1. *Define key terms relevant to cellular therapy and bone marrow transplantation*<br>2. *List laboratory equipment commonly used by a hospital cellular therapy lab in support of bone marrow transplant*<br>3. *Name the accrediting bodies with standards pertinent to cellular therapy labs*<br>4. *List key people and services inside and outside the laboratory required for a successful transplant program*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |

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| S7 – Session 7<br><br>4/25/2022<br><br>3:30-4:30pm<br><br>Executive | *Clinical Utility of Syndromic Panel-Based Testing*<br>*Speaker: Avish Nagpal MD, MPH, FACP, AAHIVS – Infectious Diseases Consultant and Medical Director for Infection Prevention*<br>*The last few years have seen a number of syndrome based multiplex assays approved by FDA for commercial and clinical use. They offer the distinct advantage of a rapid turnaround time in identifying the presence of a broad array of micro-organisms in clinical samples. However, there are a number of challenges that are posed by these multiplex assays in terms of result interpretation, cost and strategies employed for infection prevention.*<br><br>*Objectives:*<br>1. *Discuss the advantages of commercially available Multiplex in diagnosing various infectious diseases*<br>2. *Learn about real life challenges in interpretation of these tests*<br>3. *Explain how the results of these tests impact our quality metrics and resource utilization*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S8 – Session 8*<br><br>*4/25/2022*<br><br>*3:30-4:30pm*<br><br>*Board* | *TEG (Thromboelastograph) Hemostasis Analyzer System*<br>*Speaker: Aimee Venne, BSN, RN; Haemonetics TEG Clinical Specialist*<br>*TEG is a whole blood viscoelastic assay that can measure all phases of hemostasis to help predict and manage coagulopathy, help assess the risk for reoperation, and realize cost savings through the reduction of unnecessary blood component transfusions. This program will cover the basics of the technology and clinical utilization of TEG.*<br><br>*Objectives:*<br>1. *Provide a basic description of the TEG system*<br>2. *Provide an example of the differences of traditional coagulation assays and TEG*<br>3. *Explain how TEG can be utilized by clinicians for patient care*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |
| *S9 – Session 9*<br><br>*4/26/2022*<br><br>*8:30-9:30am*<br><br>*Executive* | *Blood Shortage During the Covid-19 Pandemic and Mitigation Strategies*<br>*Speaker: Rim Abdallah, M.D. – Medical Director for Vitalant*<br>*The COVID-19 pandemic has had serious negative effects on the national blood supply. Blood donations have decreased drastically because of social distancing measures and staff shortages, and supply chain issues have reduced the availability of blood banking supplies. It is now vital to implement Patient Blood Management (PBM), promote blood donations, and develop strategies to overcome these challenges.*<br><br>*Objectives:*<br>1. *Review evidence data of blood shortage and the effect of the COVID-19 pandemic on inventory and usage*<br>2. *Explain the essential role of Patient Blood Management during the pandemic*<br>3. *List implementation measures to mitigate blood shortages*<br>*Level if Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S10 – Session 10*<br><br>*4/26/2022*<br><br>*8:30-9:30am*<br><br>*Board* | *The World of Veterinary Microbiology*<br>*Speaker: Sarah Gefroh, MLS (ASCP)$^{CM}$ Diagnostic Microbiologist at North Dakota State University Veterinary Diagnostic Lab*<br>*This presentation will focus on the medical laboratory science from the veterinary perspective. We will cover identification methods, antimicrobial susceptibility testing and the significance of the organisms Bacillus anthracis and Staphylococcus pseudintermedius.*<br><br>*Objectives:*<br>1. *Identify the role of the veterinary diagnostic laboratory in public health*<br>2. *Describe the characteristics of Staphylococcus pseudintermedius and Bacillus anthracis*<br>3. *Discuss the role of Staphylococcus pseudintermedius and Bacillus anthracis in animal disease*<br>*Level of Instruction: BASIC*<br>*Contact Hours: 1.0* | |

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| *S11 – Session 11*<br><br>*4/26/2022*<br><br>*9:45-10:45am*<br><br>*Executive* | *Precision Medicine – Pharmacogenomics Overview*<br>*Speaker: Natasha Petry, PharmD, MPH, BCACP, Clinical Pharmacogenomics Pharmacist and PGY2 Residency Program Director, Sanford Health Imagenetics; Associate Professor of Practice, North Dakota State University*<br>*Pharmacogenomics is part of a larger field of medicine called Precision Medicine. Pharmacogenomics includes the intersection of pharmacology and genetics and is another clinical tool to help guide therapy. This presentation will provide a general introduction to pharmacogenomics in addition to providing examples of how the information is utilized in practice.*<br><br>*Objectives:*<br>1. *Define Pharmacogenomics*<br>2. *Describe how pharmacogenomics is used in patient care*<br>3. *List resources to aid in the use of pharmacogenomic results*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S12 – Session 12*<br><br>*4/26/2022*<br><br>*9:45-10:45am*<br><br>*Board* | *The Diagnosis of Diabetes and the Role of Glycated Proteins*<br>*Speaker: Kristin Luckenbill, PhD, JD, D(ABCC)*<br>*This session will provide an overview of diabetes mellitus, beginning with how diabetes is classified and current prevalence, followed by a review of the lab tests used to diagnose diabetes, and an assessment of the strengths and limitations of diabetes diagnostic tests. The presentation will then switch gears and look into the role that glycated proteins, like glycated albumin, could add to diabetes care.*<br><br>*Objectives:*<br>1. *Discuss the clinical signs of diabetes and the different classifications of diabetes*<br>2. *Describe the ADA diagnostic tests for diabetes, along with advantages and disadvantages to these tests*<br>3. *Summarize the role that glycated proteins could add to the diagnosis or continued care of individuals with diabetes*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S13 – Session 13*<br><br>*4/26/2022*<br><br>*11:00-11:59am*<br><br>*Executive* | *RBC Alloimmunization: Risk Factors, Blood Availability Challenges and Transfusion Support*<br>*Speaker: Rim Abdallah, M.D. – Medical Director for Vitalant*<br>*Transfusion-associated alloimmunization against RBC antigens can be a clinically significant problem. It leads to serologic investigations and makes the selection of compatible blood difficult, expensive and time-consuming. Prompt availability of compatible units for patients with complex alloimmunization requires access to an inventory of extensively typed blood and to a database of rare donors. It is essential to optimize strategies to prevent antibody development, mitigate the dangers of existing alloantibodies and expand the diversification of the donor bases by increasing the pool of minority donors.*<br><br>*Objectives:*<br>1. *Explain red blood cell alloimmunization triggers and the role of donors' and recipients' genetics and environmental influences in the process*<br>2. *Describe the difficulty of the prompt availability of compatible units for patients with complex alloimmunization illustrated with a clinical vignette*<br>3. *Review ways to minimize the likelihood of antibody formation, identify and recruit rare blood donors, and design appropriate transfusion strategies*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *S14 – Session 14*<br><br>*4/26/2022*<br><br>*11:00-11:59am* | *North Dakota Public Health Laboratory: Navigating the Pandemic*<br>*Speaker: Lisa Well, M (ASCP) Director of General Microbiology, Laboratory Services, North Dakota Department of Health*<br>*This presentation will cover the NDPHL response to the COVID-19 pandemic covering everything from partnerships with federal, state, and local agencies through the final goal of increasing testing capacity to 7500 specimens a day.*<br><br>*Objectives:*<br>1. *List tools that prepare the NDPHL for emergency response* | |

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| *Board*<br><br>*S14 – Session 14 (CONT.)* | 2. *List reasons for maintaining competency and quality control during an emergency response*<br>3. *Describe how transparency was maintained during the pandemic*<br>4. *Identify important emergency response partners*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| ***Luncheon***<br><br>*4/26/2022*<br>*12:00-1:30pm*<br><br>*Embassy Royale* | ***ASCLS-ND State Business Meeting***<br>***ALL** attendees are welcome to join us as we discuss the events of the last year and allow us all to get acquainted with ASCLS-ND, our members, our goals, our awards and our upcoming education adventures for you and also for North Dakota…* | *NA* |
| *S15 – Session 15*<br><br>*4/26/2022*<br><br>*1:45-2:45pm*<br><br>*Executive* | *Abnormal Coagulation Results – Real or "Fake"??*<br>*Speaker: Susan Hollister, MS. MT(ASCP)$^{CM}$, Coagulation Specialist*<br>*According to CAP, "one third to three quarters of laboratory errors are linked to the preanalytical phase, with coagulation testing accounting for many of the woes." How do you know if the results are real or "fake"? Case studies will be presented to determine if the patient results make sense with their diagnosis.*<br><br>*Objectives:*<br>1. *Discuss common preanalytical variables that may affect coagulation testing*<br>2. *Recognize analytical variables that may interfere with coagulation results*<br>3. *Correlate coagulation results with patient condition*<br>*Level of Instruction: INTERMEDIATE*<br>*Contact Hours: 1.0* | |
| *K3 – Keynote 3*<br><br>*4/26/2022*<br><br>*3:00-4:00p*<br><br>*Embassy Royale* | *Laboratory Diagnosis of COVID: A Target for Misinformation?*<br>*Speaker: Paul J Carson, M.D., FACP; Professor NDSU Dept of Public Health*<br>*Dr. Carson will review the current state of COVID-19 epidemiology and review the basic tools for diagnosing SARS CoV-2 infection. He will discuss the overall sensitivity and specificity of these tests and the according benefits and limitations of various testing strategies. Finally, he will discuss how the laboratory diagnosis of SARS CoV-2 infection became a particular target of misinformation that was widely spread on social media and was used to target legislators and policy makers to stop or defund testing centers and to discount cases of COVID-19.*<br><br>*Objectives:*<br>1. *Discuss the current status of epidemiology of SARS CoV-2 infection*<br>2. *List the major diagnostic methods for diagnosing SARS CoV-2 infection and their limitations*<br>3. *Explain how PCR testing of CoV-2 infection became a target of misinformation and how to counter this misinformation*<br>*Level of Instruction: ADVANCED*<br>*Contact Hours: 1.0* | |

ASCLS-ND would like to thank all the sponsors, speakers, and moderators during this 2022 ASCLS-ND State Meeting. But a special thanks to all our ATTENDEES who realized the importance of education and the ability and importance of networking within our professions.

**ASCLS-ND appreciates ALL of YOU!!**

Hope to see you in **2023**!

Don't forget to get your continuing education reported by June 1, 2022 to allow you to claim your contact hours for application to your state licensure as well as your certification needs.

**DRIVE SAFELY** – and we will live in the hope that spring may one day be here!!