



# 2015 ASCLS-WA Spring Seminar

April 23 - 25, 2015

Red Lion Hotel  
Olympia, WA



## **SPONSORS**



The 2015 ASCLS-WA Spring Seminar would like to extend its sincere thanks for the following companies for their support.

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## 2015 Spring Seminar At A Glance

<b>Thursday April 23, 2015</b>	AM	1	2	3	4
		Proteomic MicroArray	Mysterious Coagulation Results	Assessing & Mitigating Risk and Global Harmonization System	Forensic Toxicology
	PM	5	6	7	8
		New Tests in Autoimmune	Antimicrobial Susceptibility Testing	DxH Data Analysis  Digital Cell Morphology	Lipid Markers  Definition of MI and Troponin
<b>Friday April 24, 2015</b>	AM	9	10	11	12
		Urinalysis Case Studies  Correlation, Concordance and Area Under the Curve	Anticoagulants and Reversal Agents  Antibiotics!	Latest in Clinical Microbiology	Blood Bank Review for Non-Blood Bankers
	PM	13	14	15	16
		Research & Forensic Toxicology Using LC/MS/MS	Diagnostic Morphology of Selected Disorders	What Microbes Can Do to You What You Can Do to Your Microbes	Adv Immunohematology and RBC Genomics
<b>Saturday April 25, 2015</b>	AM	17	18	19	20
		<b>Cancelled</b> Packing & Shipping Division 6.2 Materials	Resumes, Cover Letters, Interviews, Financial Planning	Acute Leukemia: Historical Journey Simplified	Laboratory Test Utilization Management
	PM	17	21	22	23
		<b>Cancelled</b> Packing & Shipping Division 6.2 Materials	Where Would You Like to Go In Your Career?	Cytologic Evaluation of Body Fluids	Measuring Vitamin D: Fully Automated Immunoassay

# Welcome to the 2015 ASCLS-Washington Spring Seminar

Here is some important information that you need to know!

## To Register by Mail:

Complete the registration form and mail the registration form and check payable to

“Spring Seminar” to:

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

If questions:

Contact: [BrenKoch@comcast.net](mailto:BrenKoch@comcast.net)  
(email contact is preferred)  
Phone: 509-939-8445 (leave message)

- » **Registration mail postmark by date: April 1, 2015.** This assures that your form will be delivered in time for us to provide you with the handout access information.

## To Register Online:

Go to [www.asclswa.org](http://www.asclswa.org) and click on the **Spring Seminar tab**. On the **Spring Seminar page**, click on **Registration** to see the link for online registration. Credit cards can be used to pay for registration.

- » Registrants using the online form must have a completed registration by **April 18, 2015** to receive lunch if eligible.

## Special Member Registration Rates

Any person currently a member in good standing of the following organizations can qualify for special member registration rates for this meeting:

- AABB (American Association of Blood Banks)
- AACC (American Association for Clinical Chemistry)
- ASC (American Society of Cytology)
- ASCP (American Society of Clinical Pathologists)

Laboratory Professional Membership Category

**NOTE: Certification only through ASCP does NOT qualify you for “Special Member” rates.**

- ASCT (American Society for Cytotechnology)
- ASH (American Society of Hematology)
- ASM (American Society of Microbiology)
- CLMA (Clinical Laboratory Management Association)

## Student Registration

If you are a student in one of the Washington Clinical Laboratory Science education programs listed below, you may register for **one session at NO CHARGE** courtesy of ASCLS-Washington. See your Program Director for more information about this offer and for help in registering for the 2014 ASCLS-WA Spring Meeting.

Washington Clinical Laboratory Science Educational Programs:

- Clover Park Technical College MLT Program
- Heritage University CLS Program
- Providence Sacred Heart Medical Center MT Program
- Renton Technical College MLT Program
- Shoreline Community College MLT Program
- University of Washington MT Program
- Wenatchee Valley College MLT Program

## Handouts ONLY Available On-line

To keep registration rates as low as possible, the Spring Seminar no longer provides paper copies of the session handouts at the meeting. Session handouts will be available for download at the ASCLS-WA website, [www.asclswa.org/SpringSeminar.html](http://www.asclswa.org/SpringSeminar.html). Remember to print copies of the handouts for the sessions you registered for and bring them to the meeting with you. If you are having problems downloading a handout, please contact Brenda Kochis, [BrenKoch@comcast.net](mailto:BrenKoch@comcast.net). Handouts for the sessions will be available on the ASCLS-WA website approximately 2 weeks prior to the meeting in a password protected area. You will receive the “password” and instructions on how to print the handouts starting approximately 2 weeks before the meeting. The email will be from [BrenKoch@comcast.net](mailto:BrenKoch@comcast.net), so watch for it. Register early so that you can print the handout material for your sessions.

## Spring Seminar Committee

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Region IX Director	Shannon Billings
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ASCLS-WA Board Meeting and House of Delegates  
Friday, April 24, 2015, 5:00 PM

## Northwest State Society of the American Medical Technologists

President	Jo Abraham
Secretary	Danielle Rathbun
Treasurer	Roxanne Erskine

NWSSAMT Board Meeting and Business Meeting  
Friday, April 24, 2015, 5:00 PM

## Session Information

Registration Hours  
7:30 AM - 8:30 AM  
12:30 PM - 1:00 PM

Scientific Session  
8:30 AM - 12:00 PM  
1:00 PM - 4:30 PM

Coffee Breaks  
10:00 AM - 10:30 AM  
2:30 PM - 3:00 PM

**Lunch** is from 12:00 - 1:00 PM each day. Individuals pre-registered for **an AM and a PM session on the same day** will be provided lunch. Lunch cannot be guaranteed for onsite registrants.

**Name Badges** are required for entrance to all sessions.

**Smoking:** There is no smoking during the sessions or in the Convention Center..

**Dress:** Casual business dress is appropriate.

**Cell Phones/Pagers:** As a courtesy to the speakers and registrants, all cell phones and pagers must be turned off during the sessions.

**Meeting Room Assignments:** The meeting room assignments will be printed on the session sheet in your registration packet.

## Session Accreditations

P.A.C.E.® and AMTrax credits have been approved for all appropriate sessions.

ASCLS-WA is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® program. Additionally, ASCLS-WA is approved as a provider for California clinical laboratory licensees under P.A.C.E.® California accrediting agency license number 0001. ASCLS-WA will be using CE Organizer for documentation of continuing education credits. Please make note of the P.A.C.E.® number and the session number that will be given to attendees in each session after the session break. Without this information, the attendee will not be able to obtain their electronic certificate.

NWSSAMT is the approved provider for AMTrax CECs and insures that these educational presentations conform to standards established by AMT.

# Red Lion Hotel

2300 Evergreen Park Drive SW  
Olympia, WA 98502

Phone: 1-800-RED-LION (1-800-733-5466)  
<http://www.redlion.com/olympia>

**Rates:** \$94.00 per night plus state and local tax.  
This rate applies to single, double, triple or quad.

Please mention that you are with ASCLS-WA Spring Seminar to obtain these rates. Rates are held until April 1, 2015, after which room rates are at the discretion of the hotel.



## Driving Directions to the Olympia Red Lion

From North or South I-5:

- Take Exit 104 US Highway 101
- Take first exit, Crosby Blvd/Cooper Point Road
- Turn right on Cooper Point Road
- Take immediate right onto Evergreen Park Drive
- Turn right again on Lakeridge Way (adjacent to Morris Business Park sign)
- Continue straight to hotel entrance

From Highway 101:

- Take the Crosby Blvd/Cooper Point Road Exit
- Keep right at the fork, follow signs for Crosby Boulevard and merge onto Cooper Point Rd SW/Old Cooper Point Rd SW
- Turn right onto Evergreen Park Drive SW
- Take the 1st right to stay on Evergreen Park Dr SW
- The hotel entrance is on the right hand side

**Session  
1**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Proteomic MicroArray: The Future Replacing ELISA and Luminex Bead Multiplexing Platforms and Assays**

**- Charles Hildreth**

Director of Business Development  
Grace Biolabs  
Bend, OR

Microarray film PCR style assays are common place in the Molecular and Sequencing space. Proteomic MicroArray is present in cancer research, and drug discovery. Technical advances are here that have made Proteomic MicroArray ready for the clinical lab market.

MicroArray benefits:

1. Dynamic range and sensitivity as much as 4 times greater than present methods.
2. Internal test control and internal assay duplication gives an order of higher confidence in accuracy.
3. Unprecedented low cost scalability. A bench top analyzer can have 1000s of test per hour capability.
4. Next level multiplex in which one application is to detect the antibody (IgG, IgM, IgA) isoforms in the same reaction chamber increasing potential throughput by triple.
5. Presentation of the native conformational epitope potentially improving sensitivity and specificity to disease.

The first clinical assays include Celiac Disease, Systemic Rheumatic Disease, Allergy, Food Sensitivity, and Infectious Disease. The future for proteomic profiling of cancer tumors to select targeted therapies is also very encouraging.

Objectives:

- ✓ Describe why nitrous cellulose is an excellent medium for proteins (antigens), binds proteins remarkably well and keeps conformational epitope ( native),
- ✓ Discuss how quantum crystals as a label enhance dynamic range and sensitivity and is well suited for nitrous cellulose, and
- ✓ Discuss how the platform is well suited to large volume testing and scale.

***Sponsor: Global Focus Marketing and Distribution, LTD***



**Session  
2**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Mysterious Coagulation Results: Investigations  
and Solutions**

- **Karen A Burns, CLS MT(ASCP)**  
Senior Technical Sales Representative, Hemostasis  
Werfen/Instrumentation Laboratory  
Vancouver, WA

Using a case-based approach to unusual coagulation results, we will discuss causes of results that don't make sense in light of what is known about the patient and explain actions and improvements that can be made in the laboratory to overcome these spurious results. The cases covered will include preanalytical problems, assay sensitivity, method interferences, interpretive mistakes and anticoagulation therapy, including commonly used and new agents.

Objectives:

- ✓ Identify specimen collection and processing errors that can lead to erroneous coagulation results,
- ✓ Recognize incorrect coagulation results due to assay interferences and sensitivity, and
- ✓ Describe the effects anticoagulants have on coagulation assay results and how to best detect these.

**Sponsor: Werfen/Instrumentation Laboratory**

**Session  
3**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Assessing, Mitigating Risk and Global Harmonization  
System Review**

- **Steven J. LaCroix MS, CBSP**  
QA / Safety Officer  
Washington State Public Health Laboratories  
Shoreline, WA
- **Richard Paulette BS**  
Industrial Hygiene Consultant  
Washington State Department of Labor & Industries  
Tumwater, WA

This session will provide an overview of biosafety principles and practices, facets of the Global Harmonization System, and the Safety Data sheet. We will walk thru the determination of risk for the laboratory worker. What can you do to assess your risk, what tools are available and what steps can be implemented to mitigate the risk? We will have exercises to practice practical tools that could be implemented in your laboratory.

Objectives:

- ✓ Describe the basics of biosafety,
- ✓ Discuss the Global Harmonization Systems and SafetyData sheets, and
- ✓ Discuss the concept of risk assessment and describe some practical tools for assessing risk in the participant's laboratory.

**Sponsor: Washington State Department of Health Public  
Health Laboratories**



**Thursday, April 23, 2015**

**Session  
4**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Forensic Toxicology**

**- Janetta Bryksin, PhD, DABCC**

Laboratory Director  
Sterling Reference Laboratories  
Tacoma, WA

In this session, basic principles of Forensic Toxicology will be discussed with a focus on testing methodologies, commonly tested analytes (in particular, ethanol and designer drugs), and commonly asked questions. The differences between a clinical laboratory and forensic laboratory will be outlined.

**Objectives:**

- ✓ Define Forensic Toxicology and outline the differences between clinical laboratory and forensic laboratory,
- ✓ Discuss the common testing techniques in forensic toxicology laboratory (in particular, immunoassays and mass spectrometry), and
- ✓ Identify commonly tested analytes (illicit drugs and pharmaceuticals) in forensic laboratory and discuss challenges associated with testing for ethanol and designer drugs.

***Sponsor: Sterling Reference Laboratories***

**Student Poster Session**

A student poster session will again be held as a part of the ASCLS-WA Spring Seminar!! Come and support our future laboratory professionals by visiting the poster presentations during the meeting. PACE credits will be available to those that visit the student poster session and successfully complete an exam about the posters. This is a great way to get continuing education credits and support our students!

There is no charge to attend the poster session.

Check the ASCLS-WA website for more information about the poster topics.

**Session  
5**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**New Tests in Autoimmune**

**- Carl Schroder, MT(ASCP), MPA (Health Care)**

Manager of IFA Technical Sales  
INOVA Diagnostics, Inc  
San Diego, CA

“New tests in autoimmune” will discuss basic immunology practices and methods with a focus on testing associated with the following disease states: Connective Tissue Disease, Antiphospholipid Syndrome (APS), Inflammatory Bowel Disease (IBD) and Statin-associated myopathy.

Objectives:

- ✓ Discuss basic Immunology: antibodies, antigens, and testing platforms used,
- ✓ Describe disease states and symptoms which have necessitated various tests, and
- ✓ Discuss new assays and their role in helping the MD with his diagnosis.

**Sponsor: INOVA Diagnostics**

**Session  
6**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**Antimicrobial Susceptibility Testing Challenges  
and Update**

**- Punam Verma, Ph.D., D(ABMM), MT(ASCP)**

Director, Microbiology  
Virginia Mason Medical Center  
Seattle, WA

This workshop will focus on emerging resistance mechanisms, their detection and clinical implications. We will also discuss the latest CLSI AST/reporting recommendations, including the major changes in the standards. Accurate reporting of MDROs is critical to optimal antimicrobial stewardship.

Objectives:

- ✓ Identify the major changes found in the new CLSI standards for antimicrobial susceptibility testing,
- ✓ Describe the new strategies for the detection of antimicrobial resistance, and
- ✓ Describe the importance of accurate reporting of MDROs and the role of the clinical microbiology laboratory in antimicrobial stewardship.

**Session  
7**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**DxH Data Analysis**

**- Kathy Davidson Altig, MT(ASCP)**

Hematology Field Product Specialist  
Beckman Coulter  
West Linn, OR

This session is about Hematology Data interpretation; however, it will be using data from the Beckman Coulter DxH for specific examples. Because the DxH is being used as the exemplar, the session is especially relevant for users of the DxH. Beckman Coulter technology will be explained for those that don't use Beckman Coulter to understand the basics. Case studies will be used to demonstrate the principles.

Objectives:

- ✓ Describe Beckman Coulter CBC, Diff, NRBC & Retic Technology, especially as it pertains to the DxH,
- ✓ Identify normal and abnormal histograms, dataplots, flags and codes, and describe what they mean, and
- ✓ Apply this information to case studies in order to better understand data interpretation, and assist with the diagnosis of patients.

**Sponsor: Beckman Coulter**

**Digital Cell Morphology, Improving Efficiency,  
Proficiency and Connectivity with Relevant  
Case Studies**

**- Scott Dunbar, BS, MS**

Area Sales Manager  
CellaVision  
Flower Mound, TX

This presentation will demonstrate how digital cell morphology can impact work flow in the hematology department for peripheral blood and body fluid analysis. We will demonstrate how advanced software can impact turn-around time and improve proficiency. Furthermore, this presentation will cover how remote review software can speed up pathology consults. All of the technology will be supported with numerous case studies from real patients.

Objectives:

- ✓ Describe how artificial neural networks can aid in abnormal cell identification,
- ✓ Discuss how remote review software can improve patient care, and
- ✓ Discuss how improved standardization can be possible in an area in the laboratory that has been historically very subjective.

**Sponsor: CellaVision**

**Session  
8**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**The Clinical Utility of Lipid Markers in Cardiovascular Diseases**

- **Sheng-Ying (Margaret) Lo, PhD**  
Post Doctoral Fellow  
University of Washington  
Seattle, WA

Cardiovascular disease is the leading cause of death in the United States, with roughly 635,000 Americans experiencing their first heart attack each year. As a result, early detection and prevention of cardiovascular disease is at the forefront of public health policy. This seminar will cover recent guidelines on evaluating cardiovascular risk and the role of lipoproteins as biomarkers in coronary heart diseases.

Objectives:

- ✓ Discuss cardiovascular risk guidelines and the pathology of atherosclerosis,
- ✓ Describe lipoprotein physiology and its clinical utility as a biomarker in coronary heart diseases, and
- ✓ Discuss pharmaceutical interventions aimed at reducing cardiovascular risk by changing lipidomic profiles.

**The Universal Definition of MI and Troponin:  
Clearing the Confusion**

- **Theresa Joseph, RN, BSN**  
Medical Scientific Liaison  
Roche Diagnostics  
Indianapolis, IN

The program includes the evolving story of myocardial infarction and troponin utilization in the laboratory and clinical settings. FDA-approved uses of troponin, cardiac pathology, and current guidelines are discussed, along with the laboratory's impact on clinical decision-making. Troponin elevations outside of Acute Coronary Syndrome are also presented.

Objectives:

- ✓ Describe the evolution of Troponin testing,
- ✓ List the signs and symptoms of Acute Coronary Syndrome, and
- ✓ Explain the impact of Troponin and the laboratory on clinical decision-making.

**Sponsor: Roche Diagnostics**

**Session  
9**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Urinalysis: Case Studies and Clinical Perspectives**

**- Leslie Williams, MT (ASCP)**

Product Manager - Urinalysis  
Sysmex America, Inc.  
Lincolnshire, IL

In the age of increased focus on test utilization and improving the quality and cost of patient care, the routine urinalysis remains the equivalent of a liquid biopsy of the kidney, and offers a host of vital information to the clinician on the condition and function of the kidneys. This session will review the history and clinical significance of the humble, and sometimes undervalued, urinalysis. Case studies that demonstrate the clinical presentation of various disease states and the changes to urinary chemical and cellular output associated with each will also be reviewed.

Objectives:

- ✓ Describe the clinical significance and value of the routine urinalysis,
- ✓ Explain the basics of kidney function and how changes are reflected in the urine, and
- ✓ Describe the common cellular elements seen in routine urinalysis and the pathology associated with each element.

**Correlation, Concordance and Area Under the Curve:  
How to Compare the Apples and Oranges of  
Urinalysis Methods**

**- David Plaut**

Consultant  
Sysmex America, Inc.  
Lincolnshire, IL

Laboratory statistics can be challenging, and assessing the qualitative and semi-quantitative results commonly seen with urinalysis comparisons can be a daunting task. This session will review the basic statistics used in comparing test methods, with an emphasis on how to interpret concordance charts and truth tables. Sensitivity, specificity and the area under the curve (AUC) will be discussed, providing the user with the tools needed to effectively review and analyze the non-numeric values most often generated by urinalysis methods.

Objectives:

- ✓ Describe the basic statistics used when comparing urinalysis test methods,
- ✓ Discuss the significance of sensitivity and specificity when comparing urinalysis methods, and
- ✓ Explain the clinical impact of results posted in concordance charts and truth tables.

**Sponsor: Sysmex America**

**Session  
10**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Anticoagulants and Reversal Agents - Focus on  
4-Factor PCC**

**- Eugenia “Genie” Stansbury, RPh, BCPS**

Clinical Lead Pharmacist  
Providence St Peter Hospital  
Olympia, WA

This session offers a discussion of various anticoagulant reversal strategies with information on the use of 4-factor prothrombin complex concentrates (PCC) such as K-Centra. This includes various anticoagulants from older agents such as warfarin and heparin to the newer oral anticoagulants, their mechanism of action, place in therapy, laboratory testing, and literature and guideline based recommendations for reversal. Patient cases will be included.

**Objectives:**

- ✓ Describe various anticoagulant mechanism of action, place in therapy, laboratory testing,
- ✓ Discuss the advantages and disadvantages of various reversal strategies (including cost), and
- ✓ Describe current literature and recommendations for management of major bleeding associated with the use of anticoagulants

**Antibiotics!**

**- Elizabeth Hesselbacher, PharmD, BCPS**

Clinical Pharmacist - Antimicrobial Stewardship & Infectious Disease  
Providence St Peter Hospital  
Olympia, WA

This session will offer a brief overview / review of antibiotic classes including some basic monitoring and drug level highlights.

**Objectives:**

- ✓ Describe mechanism of action and resistance mechanisms for various antibiotic classes,
- ✓ Describe some of the newly available antibiotics, and
- ✓ Identify factors requiring antibiotic dose adjustments and basic monitoring.



## Friday, April 24, 2015

### Session 11

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

### The Latest and Greatest in Clinical Microbiology: What You Need to Know

- **Siu Kei (Jacky) Chow, PhD**  
Clinical Microbiology Fellow  
University of Washington  
Seattle, WA
- **Lori Bourassa, PhD, MPH**  
Clinical Microbiology Fellow  
University of Washington  
Seattle, WA

The clinical microbiology field is evolving at a rapid pace. Emerging technologies such as MALDI-TOF mass spectrometry, targeted molecular assays and point-of-care testing are changing workflows and increasing efficiency, resulting in dramatic changes to the practice of clinical microbiology and its impact on patient care. The speakers will provide an overview of the latest technologies and practices for the clinical microbiology lab. Additionally, recent highlights from the literature that may impact laboratory function will be reviewed. The short-term outlook and challenges for the field will also be discussed.

Objectives:

- ✓ Discuss updates in clinical microbiology regarding methodology, practice, and regulation, and
- ✓ Discuss the advantages, disadvantages and limitations associated with the new technologies in clinical microbial diagnosis.

### Session 12

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

### Blood Bank Review for Non-Blood Bankers

- **Terese M. Abreu**  
Director, Medical Laboratory Science Program  
Heritage University  
Toppenish, WA

This blood banking session is for those of you who haven't stepped foot in a Blood Bank department since becoming certified. Learn more than the nurses know and far less than needed to be an SBB in this walk down memory lane with ABO, the King of systems; Rhesus, the grand poo-bah; the naughty Kidds; and Lewis, the blood system wanna be, just to name a few. We will review basic theory and technical information then try our hand at the fun stuff solving antibody ID panels. The review will also touch on some of the newer innovations happening in transfusion medicine today.

Objectives:

- ✓ State the patient indications and contraindications for transfusion of each product,
- ✓ Name the major blood group systems and the antibody characteristics for each system, and
- ✓ Discuss three new technologies in today's blood banking departments.

**Sponsor: Heritage University**

**Session  
13**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**New Developments in Clinical Research and Forensic  
Toxicology Using LC/MS/MS**

- **Crystal Holt**  
Market Development Specialist  
AB SCIEX  
Stockton, CA
- **Devin Keller**  
MS Sales Specialist  
AB SCIEX  
Stockton, CA

Introduction to Liquid Chromatography Mass Spectrometry The use of Liquid Chromatography Mass Spectrometry (LC/MS/MS) is becoming more prevalent in clinical research laboratories throughout the world. This is a powerful analytical tool that can perform qualitative and quantitative identification for the laboratory. This workshop will provide an introduction to commonly used liquid chromatography and mass spectrometry techniques in the clinical research laboratory.

Objectives:

- ✓ Describe the components that make up an LC/MS/MS system,
- ✓ Define the terminology associated with both chromatography and mass spectrometry, and
- ✓ Summarize the theory behind mass spectrometry techniques.

**Sponsor: AB SCIEX**

**Session  
14**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**Diagnostic Morphology of Selected Disorders**

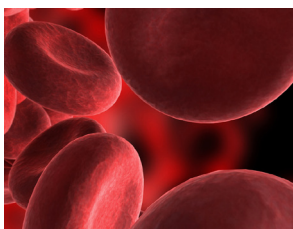
- **Keila Poulsen, BS MLS(ASCP) H, SH**  
Hematology and Histology Supervisor  
Eastern Idaho Regional Medical Center  
Idaho Falls, ID

The defining characteristics of morphology will describe and simplify the diagnostic process of selected disorders including red blood cells, nonmalignant white blood cells and chronic malignancies. Join us on this exciting journey through cellular morphological variations.

Objectives:

- ✓ Describe the significant morphology of selected RBC disorders,
- ✓ Recognize abnormal nonmalignant WBC findings, and
- ✓ Review morphologic findings significant for chronic malignancies

**Sponsor: Beckman Coulter**





**Session  
15**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**What Microbes Can Do to You and  
What You Can Do to Your Microbes**

**- Xuan Qin, PhD. D(ABMM)**

Director, Microbiology Laboratory  
Seattle Children's Hospital  
Seattle, WA

**Laboratory Diagnosis of O157 and non-O157 Shiga Toxin-  
Producing *Escherichia coli* from Clinical Samples.**

Timely and accurate diagnosis of Shiga toxin-producing *Escherichia coli* (STEC) is important. We evaluated a laboratory developed real-time PCR assay (LD-PCR) targeting stx1, stx2 and rfbEO157 in 2386 stool samples submitted to a microbiology laboratory of a tertiary pediatric center from July 2011 to December 2013. PCR-positive samples were crosschecked for Shiga toxins by EIA (ImmunoCard STAT! EHEC, Meridian Bioscience, Cincinnati, OH) and cultured in an attempt to recover STEC O157 and non-O157. LD-PCR greatly out-performed EIA and culture, and was able to differentiate STEC O157 from non-O157. Clinical significance of a rapid and sensitive STEC diagnostic test was analyzed.

**Objectives:**

- ✓ Discuss the clinical significance of STEC infection,
- ✓ Describe the performance characteristics of PCR vs. EIA and/or culture, and
- ✓ List how rapid and sensitive diagnosis of infectious diseases saves lives.

**Clinical Challenges Associated with the Isolation of Bacterial  
Small-Colony-Variants and Antibiotic-dependent Bacteria**

Antibiotic susceptibility testing is traditionally performed on bacteria capable of growth under standardized in vitro conditions, and results are interpreted as "susceptible", "intermediate", or "resistant". However, some clinical strains of bacteria have been isolated with atypical in vitro growth characteristics, including small colony variants (SCV) and/or growth dependence on a specific antimicrobial agent (GDAA), which complicates the reporting of these unusual bacteria and their susceptibilities. We summarize our experience with 54 SCV and GDAA bacteria associated with various clinical infections at Seattle Children's hospital between 2004-2014.

**Objectives:**

- ✓ Describe how antimicrobial resistance mechanisms differ in bacteria that cause acute and invasive infections versus bacteria that cause chronic infections, and
- ✓ Discuss why the laboratory interpretation and report of antimicrobial susceptibilities may not be limited to "S, I, and R".

**Session  
16**

1:00 - 4:30 pm  
Intermediate  
3 contact hours

**Advanced Immunohematology and RBC Genomics**

- **Allison Reid, MT, SBB**  
Red Cell Reference Laboratory, Lead Technologist  
Puget Sound Blood Center  
Seattle, WA
  
- **Kate Grogan, MD**  
Transfusion Medicine Fellow  
Puget Sound Blood Center  
Seattle, WA
  
- **Samantha Harris, BS**  
Red Cell Genotyping Laboratory Technologist  
Puget Sound Blood Center  
Seattle, WA

The session will include topics that cover intermediate to advanced immunohematology concepts. The speakers will focus on the work up of DAT (Coombs) positive samples, cold agglutinin disease (CAD) and paroxysmal cold hemoglobinuria (PCH), and the indications for red cell genotyping. Patient cases will be used to illustrate concepts.

**Objectives:**

- ✓ Plan serological work up of DAT positive samples,
- ✓ Compare and contrast cold agglutinin disease (CAD) and paroxysmal cold hemoglobinuria (PCH), and
- ✓ Explain how to utilize red cell genotyping in the transfusion service laboratory.

**Sponsor: Puget Sound Blood Center**



Session 17

Packaging and Shipping Division 6.2 Materials Certificate Course

8:30 am - 4:20 pm  
Interm  
3 cont

NO  
Full  
Ses



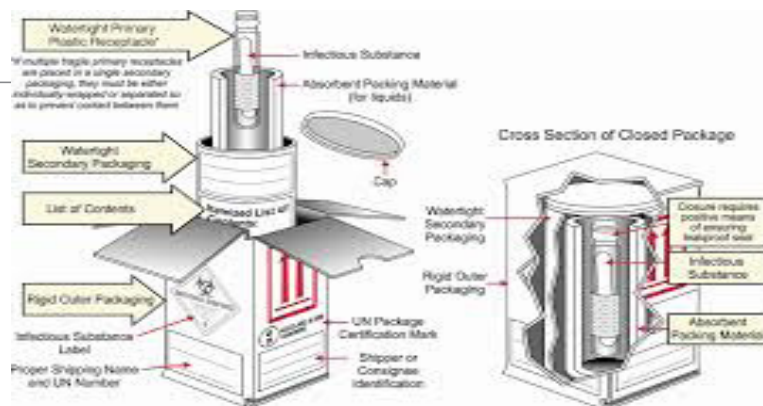
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ollow for air and land shipment of DIVISION 6.2 materials. DIVISION 6.2 Infectious Sub-  
stances are regulated as Hazardous Material and the training requirements are appli-  
cable for those who load, unload, or handle dangerous goods; mark, label or otherwise  
prepare containers or packaging for transportation of dangerous goods; or prepare a  
Shipper's Declaration of Dangerous Good form or is responsible for documentation.  
Upon successful completion of this course, participants will receive a certificate that they  
have been trained to package and ship Division 6.2 materials.

Objectives:

- ✓ Discuss how to comply with applicable regulations,
- ✓ Identify and classify types of Division 6.2 Infectious Substances including Exemptions, Category B, and Category A and identify basic triple packaging procedures for all classifications, and
- ✓ Identify the proper labels and markings required for Division 6.2 and dry ice.

**Sponsor: Washington State Department of Health Public Health Laboratories**



**Session  
18**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Resumes, Cover Letters, Interviews, Financial Planning Considerations, and the New Job**

- **Heather Eggleston, MEd**  
Academic Adviser / Program Operations Specialist  
University of Washington  
Seattle, WA
  
- **Kevin Byrne, CFP, MS**  
President  
Byrne and Company Wealth Management, LLC  
Olympia, WA

Come learn about effective resumes and cover letters. We will cover successful interviewing tips and strategies as well. We will focus on the interviewer's perspective, what you need to get across, types of interviews, preparation, and interview follow-up. This information applies equally to students just entering their profession and to current laboratory professionals looking to change jobs. What shall I do about my student loans and how does that affect my career planning? Do you have questions about paying off student loans? Saving Money? Retirement plans? And what is a 401K? All of these things come into play when you start your professional working life. This part of the session will provide answers and help you learn how to be financially smart.

Objectives:

- ✓ Describe the purpose of a resume, resume styles, content and categories,
- ✓ Describe an effective cover letter and its purpose, the employer's perspective and how to target a resume, and
- ✓ Discuss today's financial challenges to better be prepared financially.

**Session  
19**

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

**Acute Leukemia: A Historical Journey Simplified**

- **Keila Poulsen, BS MLS(ASCP) H, SH**  
Hematology and Histology Supervisor  
Eastern Idaho Regional Medical Center  
Idaho Falls, ID

From the discovery of acute leukemia, the journey to classify the various types has brought discouraging confusion. We will clarify the avenues taken and seek to stratify and simplify the 2008 World Health Organization (WHO) Classification of Acute Myeloid Leukemia.

Objectives:

- ✓ Describe the historical classification of acute leukemia,
- ✓ Recognize the unique morphology found in the various classifications, and
- ✓ Discuss the additional technologies utilized in the WHO classification and their clinical relevance.

**Sponsor: Beckman Coulter**

## Saturday, April 25, 2015

### Session 20

8:30 am - 12:00 pm  
Intermediate  
3 contact hours

### An Update in Laboratory Test Utilization Management

- **Geoffrey Baird, MD, PhD**  
Assistant Professor, Laboratory Medicine  
University of Washington  
Seattle, WA

This session will provide a background in how laboratory professionals can direct appropriate test utilization, as well as provide an update on current evidence and methodologies in test utilization management.

#### Objectives:

- ✓ Describe three effective test utilization management strategies,
- ✓ Describe three ineffective test utilization management strategies, and
- ✓ Describe how to effect a change in laboratory test utilization in one's own institution by using a strong utilization management intervention.

### Session 21

1:00 - 4:30 pm  
Intermediate  
3 contact hours

### Career Panel: Where Would You Like to Go in Your Career?

- **Eric Helmreich**  
Account Manager  
Agilent Technologies  
Everett, WA
- **Molly Morse, MS, MLS (ASCP)<sup>cm</sup>**  
MLT Program Director  
Shoreline Community College  
Shoreline, WA
- **Brandon Price, MLS (ASCP)<sup>cm</sup>**  
MLS - Generalist  
Seattle Children's Hospital, Core Lab  
Seattle, WA
- **Sigrid Reymond, MLS<sup>cm</sup>**  
Owner  
SeaMed Tech Writers  
Seattle, WA
- **Erin Tuott MLS SBB (ASCP)<sup>cm</sup>**  
MLS Lead, Transfusion Service  
Harborview Medical Center, Laboratory  
Seattle, WA

Come and listen to a panel of Professionals in the Medical Community talk about their career and how they reached their current position. Maybe this will help you as you grow in your career in this ever changing world of the Medical Field. Each speaker will discuss their current position and what steps they took to get their career launched from a Medical Laboratory Scientist to where they are today. They will offer career path advice for those attending. This is a question and answer session during the second half. Those attending the session should bring their ideas for careers or questions for the speakers to answer about when/where/and what a Medical Laboratory Scientist needs to know to change their career or how to succeed in changing their career from a bench tech to a possible leader/educator/financial career.

#### Objectives:

- ✓ Describe possible career paths that are achievable,
- ✓ Discuss the educational/training necessary for several career options, and
- ✓ Design a career path.

## Saturday, April 25, 2015

### Session 22

1:00 - 4:30 pm  
Intermediate  
3 contact hours

### Laboratory: Cytologic Evaluation of Body Fluids

- **Annette Sabath, MD**  
Group Health Cooperative  
Seattle, WA

The speaker will provide a review of major principles of laboratory body fluids evaluation, including physiology of various body fluids formation and diseases association. There will be an emphasis on cytological evaluation with proper collection, fixation and preparation requirements; review of normal and abnormal cell components of body fluids, and expanded cytomorphological rules and patterns to tell benign from malignant cells and their mimickers.

Objectives:

- ✓ Describe the basic physiology of body fluids formation and discuss the association of major diseases with abnormal body fluid formation,
- ✓ Identify appropriate methods for body fluid collection and requirements for body fluids processing in the laboratory for cytological evaluation, and identify normal cells in various body fluids, and
- ✓ Discuss the major principles and approach to cytomorphological evaluation of cells to tell benign from malignant.

### Session 23

1:00 - 4:30 pm  
Intermediate  
3 contact hours

### Measuring 1,25-dihydroxyvitamin D, The Active Metabolite of Vitamin D: A Novel Fully Automated Immunoassay

- **Claudia Zierold, PhD**  
Manager, Scientific Affairs  
DiaSorin  
Stillwater, MN

The physiological and clinical significance of vitamin D metabolites will be explored, and the first fully automated 1,25-dihydroxyvitamin assay will be evaluated. In addition, the current state of 25-hydroxyvitamin D testing will be discussed.

Objectives:

- ✓ Describe the physiological and clinical significance of vitamin D metabolites,
- ✓ Discuss the novelty of the fully automated 1,25-dihydroxyvitamin D assay, and
- ✓ List the immunoassay differences in 25-hydroxyvitamin D testing.

**Sponsor: Diasorin**

### Handouts

Handouts are only available online at [www.asclswa.org](http://www.asclswa.org). Several weeks before the Seminar, Registrants will receive an email from [BrenKoch@comcast.net](mailto:BrenKoch@comcast.net) with session confirmations and instructions for accessing the handouts. Be sure to print them and bring them with you to the meeting. No handouts will be available onsite.

## ***Interested in joining ASCLS?***

You can get member rates for this meeting!

All new members have the opportunity to join ASCLS and receive 15 months for the price of 12. You can go to [www.ascls.org](http://www.ascls.org) and click on "Join ASCLS" the horizontal menu bar running across the home page. There you will find the New Member Application. If you join through the ASCLS website **March 1, 2015 or later**, you will get a membership through July 31, 2016. By joining through the ASCLS website, you will have your member number mailed to you immediately. No waiting for snail mail.

# OR

You can obtain a membership application that can be completed and mailed with a check at the following URL:

<http://www.ascls.org>

Remember that you have to be a **new member** and join after **March 1, 2015** to get the 15 months for the price of 12.

The 2015 Spring Seminar Program, registration form and any updates are available on the Internet at the following URL

[www.asclswa.org/SpringSeminar.html](http://www.asclswa.org/SpringSeminar.html)

All information will be provided at this site. There is a registration form that you can print and mail with a check. Also, at this site there is a link to an online form that you can complete and pay using a credit card.



# Registration General Information

## To Register by Mail:

Complete the registration form and mail the registration form with a check payable to

### Spring Seminar to:

2015 ASCLS-WA Spring Seminar  
Brenda Kochis  
44 West 26th Avenue  
Spokane, WA 99203-1818

If questions:

Contact: [BrenKoch@comcast.net](mailto:BrenKoch@comcast.net) (email contact is preferred)

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

- » **Registration mail postmark by date: April 1, 2015.** This assures that your form will be delivered in time for us to provide you with the handout access information.

## To Register Online:

Go to [www.asclswa.org](http://www.asclswa.org) and click on the **Spring Seminar** tab. Click on **“Online Registration”** to go to the online form. Credit cards can be used to pay for registration.

- » Registrants using the online form must submit their completed registration by April 18, 2015 to receive lunch if eligible.

- **Lunch** is provided for those that register for two sessions on the same day. Lunch is not provided for those that register for one session a day or for those that register on site.
- **Handouts** for all sessions will only be available online. Registrants will be sent the web address, username and password to access the handouts. Please print your email address clearly.
- **All sessions** are approved for P.A.C.E.® and AMTrax credits.
- **Hotel reservations:** See page 5 of this booklet or the website for more detailed information. Please call the hotel for reservations. Mention “ASCLS-WA Spring Seminar” to get the seminar rates. Rates will be available until April 1, 2015 after which it will revert to standard hotel rates.
- **No “Spring Seminar” Registration refunds** will be issued.
- **Fees are by session.** Session 17 is an all day session and has a fixed fee. Other sessions are 3 hours (half day). Please register for the membership category that you qualify for. More information about fee categories are on the website at [www.asclswa.org](http://www.asclswa.org) tab: Spring Seminar.

## Special Member Registration Rates

Any person currently a member in good standing of the following organizations can qualify for special member registration rates for the meeting:

- AABB (American Association of Blood Banks)
- AACC (American Association for Clinical Chemistry)
- ASC (American Society of Cytology)
- ASCP (American Society of Clinical Pathologists)  
Laboratory Professional Membership Category

### NOTE: Certification only through ASCP

does NOT qualify you for “Special Member” rates.

- ASCT (American Society for Cytotechnology)
- ASH (American Society of Hematology)
- ASM (American Society of Microbiology)
- CLMA (Clinical Laboratory Management Association)

## Student Registration

If you are a student in one of the Washington Clinical Laboratory Science education programs listed below, you may register for **one session at NO CHARGE** courtesy of ASCLS-Washington. See your Program Director for more information about this offer and for help in registering for the 2015 ASCLS-WA Spring Meeting.

Washington Clinical Laboratory Science Educational Programs:

- Clover Park Technical College MLT Program
- Heritage University CLS Program
- Providence Sacred Heart Medical Center MT Program
- Renton Technical College MLT Program
- Shoreline Community College MLT Program
- University of Washington MT Program
- Wenatchee Valley College MLT Program



# Registration Form

2015 ASCLS-WA Spring Seminar  
 April 23 - 25, 2015  
 Olympia, WA

*Online registration and credit card payment is available at  
[www.asclswa.org/SpringSeminar.html](http://www.asclswa.org/SpringSeminar.html)  
 or  
 Mail this form with a check.*

First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_  
 Day Phone \_\_\_\_\_ Evening Phone \_\_\_\_\_  
 Institution \_\_\_\_\_  
 City/State \_\_\_\_\_  
 Email Address \_\_\_\_\_

Are you willing to serve as a session moderator?  Yes  No

**Circle the sessions  
 you will be attending.**

Thursday, April 23	AM	1	2	3	4
	PM	5	6	7	8
Friday, April 24	AM	9	10	11	12
	PM	13	14	15	16
Saturday, April 25	AM		18	19	20
	PM		21	22	23

Category	# Sessions	Fee/session	Total Fee
<b>ASCLS/AMT Professional/Technical</b> .....		\$45.00	\$
ASCLS # _____ AMT # _____			
<b>Special Member</b> .....		\$60.00	\$
___AABB ___AACC ___ASC ___ASCT ___CLMA ___ASM ___ASH ___ASCP Member number _____			
<b>Non-Member</b> .....		\$80.00	\$
<b>Phlebotomist</b> .....		\$35.00	\$
<b>Student</b> .....		\$25.00	\$
<b>Total Fee</b> .....			\$

Mail with check to  
**2015 ASCLS-WA Spring Seminar**  
**Brenda Kochis**  
**44 West 26th Avenue**  
**Spokane, WA 99203-1818**

Full payment in U.S. Dollars must accompany each mailed in  
 registration. Make check payable to **Spring Seminar**  
 Mail by April 1 to assure timely arrival  
**OR**  
 Online registration with credit card payment is available at  
[www.asclswa.org/SpringSeminar.html](http://www.asclswa.org/SpringSeminar.html)