# 2010 ASCLS-WASHINGTON SPRING SEMINAR



Lynnwood Convention Center Lynnwood, WA April 22 - 24, 2010

#### Welcome to the 2010 ASCLS-Washington Spring Seminar

Welcome to the 2010 ASCLS-Washington Spring Seminar!

The Seattle Society for Clinical Laboratory Science is proud to host the 2010 Annual ASCLS-WA Spring Seminar. We invite our colleagues in the laboratory profession to join us at the Lynnwood Convention Center in Lynnwood, WA for three days of high quality, informative continuing education. This meeting provides you with the opportunity to update your knowledge of cutting edge topics and refresh your skills in core laboratory areas.

We would like to thank all those involved for generously giving their time and expertise, and for their commitment to the profession to produce a premier continuing education meeting of this caliber for laboratory professionals.

We look forward to welcoming you to the 2010 ASCLS-WA Spring Seminar. Spend some time networking, learn lots, and above all else, have a great time.

#### **Student Registration**

If you are a student in one of the Washington Clinical Laboratory Science education programs listed below, you may register for one half-day 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 2010 ASCLS-WA Spring Meeting.

Washington Clinical Laboratory Science Educational Programs:

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



### SPONSORS

The 2010 ASCLS-WA Spring Seminar would like to extend its sincere thanks for the following companies and organizations for their support.

#### ARUP

### **BD Diagnostics**

#### Beckman Coulter, Inc.

### **Bio-Rad Laboratories**

Centers for Medicare & Medicaid Services Region X CLIA program

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North Puget Sound Society for Clinical Laboratory Science

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Sysmex

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Washington State Department of Health Medical Test Site Licensing Program

#### **Spring Seminar Committee**

General Chair	Sue Seegers	Registration Hours 7:30 AM - 8:30 AM
Program	Leonard Kargacin	12:00 PM - 1:00 PM
	Roxann Gary Leslie Nakagawa Michael Sealfon Ryan Si	Scientific Session 8:30 AM - 12:00 PM 1:00 PM - 4:30 PM
	Ly Tok	Coffee Breaks
	Paul Vogi	10:00 AM - 10:30 AM 2:30 PM - 3:00 PM
Registration	Jeanne Johnson	
	Mi-Lim Kim Edith Milan	Lunch is from 12:00 - 1:00 PM each day. Individuals preregistered for an AM and a PM session on the same day will be provided lunch. Lunch cannot
Program Design/ Webmaster	Brenda Kochis	be guaranteed for onsite registrants.
Webindotei		Name Badges are required for entrance to all
Finance	Linda Breiwick	sessions.
	Kristin Engstrom	<b>Smoking</b> : There is no smoking during the sessions or in the Convention Center.
Moderators	Roxann Gary	
Chanaara		<b>Dress</b> : Casual business dress is appropriate.
Sponsors	Peggie Fong	Cell Phones/Pagers: As a courtesy to the speakers
Advisor	Molly Morse	and registrants, all cell phones and pagers must be turned off during the sessions.

#### **ASCLS-Washington**

Region IX Director	Mary Lashinski
President President Elect	Molly Morse
Secretary Treasurer Past President	Sue Seegers Mike Gaulke Mary Helen Carroll

ASCLS-WA Board Meeting and House of Delegates Friday, April 23, 2010, 5:00 PM

#### Northwest State Society of the American **Medical Technologists**

President	Jo Abraham
Vice President	C. Ron Cato
Secretary	Susanna Hancock
Treasurer	James Grettner
Treasurer	James Grettner

NWSSAMT Board Meeting and Business Meeting Friday, April 23, 2010, 5:30 PM

#### Session Information

Registration Hours 7:30 AM - 8:30 AM 12:00 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 preregistered 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.
<b>Smoking</b> : There is no smoking during the sessions or in the Convention Center.
<b>Dress</b> : Casual business dress is appropriate.
<b>Cell Phones/Pagers</b> : As a courtesy to the speakers and registrants, all cell phones and pagers must be turned off during the sessions.
<b>Meeting Room Assignments</b> : The meeting room as- signments will be printed on the session sheet in your registration packet. A floor plan will be available at the registration desk.
Session Accreditations
P.A.C.E.® and AMTIE 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.

Be prepared to list your social security number for the AMTIE rosters. NWSSAMT is the approved provider for AMTIE CECs and insures that these educational presentations confirm to standards established by AMTIE.

### **Convention Center and Hotel**

#### Lynnwood Convention Center

3711 196th Street SW Lynnwood, WA 98036

Toll Free: 888-778-7155 Fax: 425-778-7965 Website: http://www.lynnwoodcc.com

The Lynnwood Convention Center has 600 free parking places. All sessions will be at the Convention Center

There is no charge for parking at the Lynnwood Convention Center.

#### DIRECTIONS FROM SEATTLE:

- Take I-5 North; Take Exit 181B (Alderwood Mall)
- Take left onto Poplar Way (first light)
- Take left onto 196th Street
- Drive West over the freeway, Convention Center is on the right.
- For the Alderwood Best Western Hotel, turn right onto 36th Avenue W (The Best Western Alderwood is on the left just North of the Lynnwood Convention Center.)

#### DIRECTIONS FROM EVERETT:

- Take I-5 South; Take Exit 181 West
- Drive West one block, Convention Center is on the right.
- For the Alderwood Best Western Hotel, turn right onto 36th Avenue W (The Best Western Alderwood is on the left just North of the Lynnwood Convention Center.)

#### DIRECTIONS FROM EASTSIDE/BELLEVUE

- Take I-405 Northbound
- Merge onto I-5 Southbound; Take Exit 181
  West
- Drive West one block, Convention Center is on the right.
- For the Alderwood Best Western Hotel, turn right onto 36th Avenue W (The Best Western Alderwood is on the left just North of the Lynnwood Convention Center.)



#### **Best Western Alderwood Hotel**

19332 36th Ave W Lynnwood, WA 98036 Phone: 425-775-7600 Fax: 425-771-3087

Website: http://www.bestwesternwashington.com/hotels/best-western-alderwood/

The Hotel will honor the following overnight room rates:

\$69.00 for single occupancy \$69.00 for double occupancy

Note: There is an addition \$10.00 per person charge for the 3rd and 4th person.

Hotel room rates are subject to applicable state and local taxes.

**Reservations**: Call the hotel at 1-800-205-6935 or 1-425-775-7600. You must request the ASCLS-Washington group rate to obtain the listed room rate. The group rate will be honored until April 7, 2010

There is no charge for parking at the Best Western Alderwood Hotel.

### Session #1

8:30 AM - 12:00 PM 3 Contact Hours Advanced

#### The Detection and Identification of Microbial Nucleic Acids from Clinical Specimens

The algorithms used to detect and identify microbial nucleic acids from clinical specimens, as well as the approach used to design individual assays will be discussed. Participants having specific related questions are encouraged to submit them to the speaker prior to the session.

email: jprentic@u.washington.edu Subject: Spring Seminar Question.

At the end of this section, participants will be able to:

- ✓ Discuss the process for detecting and identifying microbial nucleic acids from clinical specimens, and
- ✓ Discuss what is involved in designing and validating an assay.

#### Selected Topics in Antibiotic Susceptibility Testing

This section will review antibiotic classes and mechanisms of action as well as current recommendations and techniques for routine susceptibility testing of commonly encountered organisms. Screening and confirmatory procedures for emerging resistance mechanisms will also be discussed. Participants having specific related questions are encouraged to submit them to the speaker prior to the session.

email: gmetzger@u.washington.edu Subject: Spring Seminar Question.

At the end of this section, participants will be able to:

- $\checkmark$  Describe different antibiotic classes and mechanisms of action,
- ✓ Discuss screening and confirmatory procedures for emerging resistance mechanisms, and
- ✓ List common sources of errors in antibiotic testing.

#### Phenotype vs. Genotype

Phenotypic and Genotypic testing will be debated for the clinical microbiology laboratory.

At the end of this section, participants will be able to:

- ✓ Discuss the benefits and deficiencies of both phenotypic and genotypic testing, and
- ✓ Discuss when each type of testing is appropriate.

#### JENNY PRENTICE, MS, MT

Research Scientist University of Washington Medical Center Seattle, WA

#### **GREG METZGER, CLS**

Clinical Microbiologist University of Washington Medical Center Seattle, WA

### Session # 2

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

#### **Biomarkers in the Early Detection of Sepsis**

Sepsis is a complex clinical syndrome that is a leading cause of death worldwide. Onset can be rapid, with mortality occurring in as little as 24-48 hours. Pathogenesis is often associated with the "cytokine storm," an uncontrolled response of the immune system, which can lead to hemodynamic instability and organ failure. Clinical symptoms alone are often insufficient for an early and accurate diagnosis, reducing an already limited window for effective treatment. Emerging biomarkers of sepsis may allow a more rapid and accurate diagnosis, resulting in earlier intervention and improved patient outcomes.

#### **Biomarkers in Breast Cancer**

Biomarkers play a useful role in the diagnosis and treatment of cancer. The role of HER-2/neu in the diagnosis and monitoring of breast cancer is also reviewed, including tests that utilize either tissue or serum samples.

#### Clinical Utility of B-type Natriuretic Peptides in Acute Coronary Syndrome and Heart Failure

Understanding the function of natriuretic peptides (BNP and NT-proBNP), both as a cardiohormone and as a clinical test, is important in the diagnosis and management of cardiovascular disease. Clinical utility of BNP and NT-proBNP testing has had tremendous impact for medical professionals involved in HF and ACS patient care. This seminar presents current applications of BNP and NT-proBNP assays that both demonstrate a high degree of diagnostic accuracy and clinical relevance for both acute and chronic heart failure.

At the end of this session, participants will be able to:

- ✓ Identify the clinical value for early identification of sepsis,
- ✓ Describe the role of HER2/neu in the diagnosis and monitoring of breast cancer, and
- Describe the current clinical utility of BNP and NT-proBNP testing for diagnostic and prognostic applications in HF and ACS.

MONET N. SAYEGH MD Medical Consultant Siemens Healthcare Diagnostic Simi Valley, CA

This session is sponsored by Siemens Healthcare Diagnostics.

### Session # 3

## Molecular Hematopathology: Select Myeloid and Lymphoid Malignancies

Dr. Wu will present and discuss select myeloid and lymphoid neoplasms in regard to morphology and molecular hematopathology.

At the end of this session, participants will be able to:

✓ Discuss the morphology and molecular hematopathology of select entities presented.

DAVID WU, MD, PHD Assistant Professor UWMC Department of Laboratory Medicine Seattle, WA

### Session #4

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

## Proficiency Testing : Refer or Not to Refer, That is the Question

This course will cover CLIA regulations at Subpart H -- Proficiency Testing. The focus of the session will be on PT referral and inter-laboratory communication. Instructors will present real PT referral issues and discuss ways to strengthen PT policies to avoid potential problems. A discussion on the seriousness of referring PT samples and inter-laboratory communications will be included.

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

- ✓ Discuss what constitutes PT referral and inter-laboratory communication,
- ✓ Understand the CLIA rule about PT referral, and
- ✓ Discuss the consequences of PT referral.

#### FRANCISCA L. LEHR

Laboratory Surveyor & Consultant Centers for Medical & Medicaid Services Seattle, WA

SUSAN WALKER

Program Manager Medical Test Site Licensing Program Seattle, WA

The speakers for this session were provided courtesy of the Centers for Medicare & Medicaid Services CLIA Program and the Washington State Department of Health Medical Test Site Licensing Program.

Registration is limited to 30 people. On the line to the right of session 4 on the registration form on page 21, please indicate your second choice if this session is full. Early registration improves your chance of getting into this session.

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

### Session # 5

1:00 - 4:30 PM 3 Contact Hours Intermediate

## Patient Safety and the Clinical Laboratory—How to Meet the Institute of Medicine's Aims for Quality Healthcare

This session will discuss how Clinical Laboratory Science Professionals can monitor and improve their services to make contributions to heath care that is safe, effective, timely, efficient, equitable, and patient-centered. Audience participation will be encouraged.

At the end of this session, participants will be able to:

- ✓ Define the six aims of the Institute of Medicine to improve the quality of healthcare,
- ✓ Describe a method for each of the six IOM aims to improve the quality of clinical laboratory services, and
- Classify data collection methods to demonstrate improving patient safety for clinical laboratory services.

#### CATHERINE OTTO, PHD, MBA, CLDIR(NCA)

Associate Professor Pacific University Hillsboro, OR

### Session # 6

1:00 - 4:30 PM 3 Contact Hours Intermediate

#### **Emerging Infectious Diseases**

The emergence of novel pathogens as well as changing geographic distribution of established infectious agents poses a significant public health challenge. Recent epidemic outbreaks of pandemic influenza and West Nile Virus have illustrated the critical role of laboratory diagnostics for public health response as well as individual patient care. They have also invigorated private and public health initiatives to develop more robust pathways for response to future outbreaks. A variety of exciting new molecular technologies are now available to laboratories for pathogen detection, quantification, and nucleic acid sequence characterization. These and other tools have dramatically improved the capacity for pathogen discovery and coordinated health care response. This session will review the role of the clinical laboratory in the public health response to emerging infectious diseases and individual patient care.

At the end of this session, participants will be able to:

- ✓ Discuss the worldwide spectrum of new and emerging infectious pathogens and recognize those agents with the greatest potential to impact U.S. populations,
- ✓ Describe the use of new technologies for pathogen discovery or diagnostic testing, and
- ✓ Discuss the need for rapid laboratory response to the threat of emerging infectious agents and path ways associated with discovering those solutions

#### DAVID R. HILLYARD, MD

Professor, University of Utah School of Medicine, Salt Lake City, UT

#### This session is sponsored by ARUP.

### Session #7

1:00 - 4:30 PM 3 Contact Hours Intermediate

## Use of Reticulocyte Hemoglobin Content (CHr) in the Diagnosis of Iron Deficiency Anemia

In this section the speaker will discuss the use of reticulocyte hemoglobin content CHr parameter in the diagnosis of Iron Deficiency Anemia. She will also describe the use of the ADVIA 2120i Hematology system.

At the end of this section, participants will be able to:

- ✓ Describe the use of the CHr parameter in the diagnosis of Iron Deficiency Anemia, and
- ✓ Describe the use of the CHr parameter in the monitoring of Iron Deficiency Anemia therapy.

#### **RITA WHITE**

Marketing Manager Siemens Healthcare Diagnostics

### "Bleeding is Not an Option" - The Clinical Utility of the PFA100 Platelet Function Analyzer

The speaker will discuss the role of platelets in primary hemostasis and the utility of the PFA100 platelet function analyzer in pre-operative detection of primary hemostasis defects.

At the end of this section, participants will be able to:

- ✓ Identify the role of platelets in primary hemostasis,
- ✓ Discuss the principle of operation of the PFA100 system,
- ✓ Describe the use of the PFA100 as a pre-operative screen for primary hemostasis defects and how that can be used to better manage patients at risk.

#### DEBBIE GREENBERG, MT(ASCP)

Hemostasis/Hematology/Urinalysis Sales Specialist Siemens Healthcare Diagnostics Renton WA

This session is sponsored by Siemens Healthcare Diagnostics.

### Session #8

1:00 - 4:30 PM 3 Contact Hours Intermediate

## Serum Free Light Chain Assay for Diagnosis and Monitoring of Multiple Myeloma and Other Monoclonal Gammopathies

The serum free light chain assay, Freelite<sup>TM</sup>, is a highly specific, quantitative and fully automated approach to measure free lambda and kappa light chains in the serum. The sFLC assay provides a sensitive indicator of patient status in the diagnosis, treatment, and remission of Multiple Myeloma and other B-cell dyscrasias and can differentiate between monoclonal gammopathy and polyclonal gammopathy possibly due to inflammatory disease, autoimmune disease and renal dysfunction. Enhanced diagnostic capability has been demonstrated when sFLC testing is used in conjunction with either SPEP or IFE. Concepts of the biology of free light chain processing in vivo as it affects test results in clinical samples will be presented. Utilization of the free light chain assay and  $\kappa/\lambda$  free light chain ratios for risk stratification, diagnosis and monitoring of monoclonal gammopathies and updates on recent studies that describe the utility of the sFLC assay for patient management will be discussed.

At the end of this session, participants will be able to:

- ✓ Describe the role of the sFLC assay in the diagnosis and monitoring of patients with MM and other B-cell dyscrasias,
- ✓ Discuss the processing of free light chains in vivo, and
- $\checkmark$  Outline how the sFLC assay and  $\kappa/\lambda$  free light chain ratios are utilized for risk stratification, diagnosis and monitoring of monoclonal gammopathies.

#### ANNE L. SHERWOOD, PHD

Technical Director The Binding Site San Diego, CA

This session is sponsored by The Binding Site.

### Session # 9

Personnel Management—How to Enhance the Quality of Your Workforce

This session will discuss principles of managing the work of others. Topics to be covered include communication, leadership, motivation, morale issues, and resolution of disciplinary actions. This session will be interactive, using cases and examples to demonstrate the concepts.

At the end of this session, participants will be able to:

- ✓ Identify how leadership style impacts the work environment,
- ✓ Describe two methods to improve morale in the workplace, and
- ✓ Discuss options to resolve behavioral problems.

#### CATHERINE OTTO, PHD, MBA, CLDIR(NCA)

Associate Professor Pacific University Hillsboro, OR

Session #10

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

#### **Magnificent Morphology and Morphology in Action**

Morphology of the WBC, RBC, and platelet cell lines will be reviewed with emphasis on significance of abnormalities in the peripheral blood smear. The second part of program uses mini-case studies to integrate patient presentation and laboratory test results to construct a working diagnosis. Emphasis will be on peripheral blood and bone marrow morphology. Interactive participation is expected.

At the end of this session, participants will be able to:

- ✓ Correlate common morphologic erythrocyte, leukocyte, and platelet variations with pathophysiology and clues to diagnosis,
- ✓ Correlate peripheral blood findings with expected bone marrow morphology, and
- ✓ Using mini-cases, determine a working diagnosis and additional laboratory testing needed.

#### BERNADETTE RODAK, MS, CLSPH(NCA)

Professor of Pathology and LaboratoryMedicine Indiana University Indianapolis, IN 8:30 AM - 12:00 PM 3 Contact Hours Intermediate

### Session # 11

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

## Mycology Review 101: For Those Whose Mycology Basics are FUZZY

This session is designed to review basic specimen set up and identification of common fungi using routine laboratory techniques. We will review fungi that are associated with a given specimen or body site. Case studies will be presented to help correlate common fungi isolates with patient history, and give the clinical laboratory a hint in solving the fungal agent. Emphasis will be given to safe procedures and requirements for handling and processing specimens for in-house or reference laboratory testing. Present molecular testing available for confirmation of fungal isolates will be reviewed.

At the end of this session, participants will be able to:

- ✓ Review requirements for specimen set up, and processing of fungal cultures,
- ✓ Use clinical information and patient history to help determine the clinical significance of a clinical isolate, and
- ✓ Describe laboratory techniques used to identify commonly isolated molds and yeast.

#### KELLY L JOHNSON RM(AAM), M(ASCP)

Clinical Microbiologist Shoreline Community College Seattle, WA

### Session # 12

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

## Genetic Testing for Personalized Drug Therapy and Disease Evaluation

Genetic testing, a major new technique to improve "personalized medicine", is now successfully used to: 1. Determine the variable genetic sensitivity to drugs in individuals in order to provide appropriate dosing and prevent toxic side effects, as well as to insure that drug dose levels will be clinically effective, and 2. assess risk of a future disease, as well as monitor therapy in affected patients. Genetic testing to evaluate drug therapy (Warfarin, Tamoxifin, and Plavix) will be discussed. Genetic testing to evaluate estrogen hormone replacement therapy (HRT) and risk of breast cancer will be reviewed. Also discussed will be the use of individual genetic information to diagnose and monitor therapy in Multiple Sclerosis.

At the end of this session, participants will be able to:

- ✓ Describe concepts including pharmacogenetics and pharamacodynamics, including a review of basic pharmacokinetics,
- $\checkmark$  Define SNP (single nucleotide polymorphism) analysis and RNA expression analysis,
- ✓ Describe how individual genetic variation can reduce risk of damage from drug overdosing or under dosing, and
- ✓ Outline the value of individual genetic analysis to improve disease management.

#### LAURANCE FERRERI, PHD

Laboratory Director Iverson Genetic Diagnostics, Inc. Bothell, WA

#### This session is sponsored by Iverson Genetic Diagnostics, Inc.

### Session #13

1:00 - 4:30 PM 3 Contact Hours Intermediate

#### How HbA1c as a Screening Test Could Impact Your Laboratory

HbA1c method standardization has been achieved within the United States. The speaker will discuss the following questions regarding screening for diabetics and pre-diabetics: Why use HbA1c in the screening process? What changes are needed to use HbA1c in the screening process and how will they impact your laboratory?

At the end of this portion of the session, participants will be able to:

- ✓ Discuss the background of HbA1c Global Standardization,
- ✓ Describe what changes are taking place in the HbA1c testing market, and
- Summarize the impact these changes will have on your laboratory and your HbA1c testing performance requirements.

#### **CRAIG CARTWRIGHT**

Senior Product Manager, Diabetes Bio-Rad Laboratories Hercules, CA

#### Hemoglobinopathies and Thalassemias

Hemoglobin (Hb), the oxygen-carrying protein found in red blood cells, is made up of a non-protein heme group and four globular protein subunits, called globins. Defects in these protein subunits cause a variety of disorders known as hemoglobinopathies and thalassemias, which are inherited and cause various degrees of anemia, morbidity, and even mortality. The underlying causes of the two types of disorders, however, are quite distinct. Individuals with hemoglobinopathies express a structural variant of one or more of the globin chains, while individuals with thalassemias produce reduced amounts of one of the globin chains. So far, more than 700 globin chain variants have been identified, as well as more than 170 gene mutations and deletions that reduce synthesis of alpha ( $\alpha$ ), beta ( $\beta$ ) or delta ( $\overline{\delta}$ ) globin chains.

Today, laboratory testing for hemoglobinopathies and thalassemias is growing in importance. Lab evaluation of the disorders requires robust methods and a good understanding of the genetic factors involved. This session will provide a brief overview of the genetics of hemoglobinopathies and thalassemias and describes the analytical methods used by labs to evaluate them.

At the end of this session, participants will be able to:

- ✓ Discuss the laboratory findings associated with thalassemias,
- ✓ Describe the laboratory methods used to detect abnormal hemoglobins, and
- ✓ Describe the most common hemoglobinopathies and how to diagnose them.

SHIRLEY L. WELCH, PHD Director of Chemistry

Kaiser Permanente Portland, OR

This session is sponsored by Bio-Rad Laboratories.

### Session #14

1:00 - 4:30 PM 3 Contact Hours Intermediate

## Stem Cells Grafts: Indications and Safety for Donors and Patients

This section will review the sources of stem cell grafts for autologous and allogenic transplantation. Dr. Linenberger will discuss the safe procurement of bone marrow and peripheral blood stem cells and the potential complications and adverse events that are relevant to the collection facility and cellular processing laboratory.

At the end of this section, participants will be able to:

- ✓ Discuss the different indications and uses of bone marrow, peripheral blood stem cells, and umbilical cord blood cells, and
- ✓ Outline the safety concerns for stem cell donors and recipients that are relevant to the laboratory.

#### MICHAEL LINENBERGER, MD

Medical Director, Apheresis and Cellular Therapy Seattle Cancer Care Alliance and Fred Hutchinson Cancer Research Center Seattle, WA

#### **Bone Marrow Overview**

During this presentation indications of bone marrow sampling, appropriate sites for bone marrows, and review of morphologic features of the bone marrow will be discussed and illustrated. Other discussion will include studies that can be performed on bone marrow, including cytochemical stains, chromosome analysis, immunophenotyping and molecular studies. Cases will be used for summary.

At the end of this section, participants will be able to:

- ✓ List indications for bone marrow sampling,
- ✓ Identify appropriate sites for bone marrow aspirate and biopsy in adults and children,
- ✓ Summarize examination of bone marrow under low power and oil immersion,
- ✓ Describe cytologic features of hematopoietic cells found in aspirates,
- ✓ Characterize features of tumor cells in bone marrow, and
- ✓ Discuss other studies that can be performed on bone marrow, including cytochemical stains, chromosome analysis, immunophenotyping and molecular studies.

#### BERNADETTE RODAK, MS, CLSPH(NCA)

Professor of Pathology and LaboratoryMedicine Indiana University Indianapolis, IN

### Session #15

1:00 - 4:30 PM 3 Contact Hours Intermediate

#### Parasitology Review 102: Adventures in Parasites

This session will cover parasite infections in humans, and domestic and wild animal populations. Focus will be given to laboratory specimen processing and identification of parasites commonly (and not so commonly) seen in the clinical laboratory. Parasite lifecycles and animal hosts will be reviewed. Zoonotic parasite infections caused by organisms such as Raccoon Roundworm will also be discussed.

At the end of this session, participants will be able to:

- ✓ Explain sample processing and laboratory tests to identify parasites in a clinical laboratory,
- $\checkmark$  Describe the lifecycles of common and uncommon parasitic organisms, and
- ✓ Discuss the relevance of parasites through case studies and a review of the current literature.

#### KELLY L JOHNSON RM(AAM), M(ASCP)

Clinical Microbiologist Shoreline Community College Seattle, WA

### Session #16

1:00 - 4:30 PM 3 Contact Hours Intermediate

## From Arachidonic Acid to Oxidized LDL: Monitoring the Progression of Atherosclerosis

This session will be a review of the arachidonic acid pathway and platelet activation, atherosclerotic inflammation and oxidized-LDL complexes, and the significance of specific tests to monitor these markers

At the end of this session, participants will be able to:

- ✓ Describe the contribution of thromboxane in platelet activation,
- ✓ Outline the role of oxidized-LDL complexes in the initiation and progression of atherosclerotic cardio vascular disease, and
- $\checkmark$  Discuss the significance of diagnostic testing for these markers.

JON GESKE, PHD KIRK GUYER LUIS LOPEZ, MD Corgenix, Inc. Broomfield, CO

This session is sponsored by Corgenix, Inc.

### Session #17

#### **Motivating and Engaging Employees**

The speaker will present effective strategies to motivate and engage employees with the goal of reducing conflict in the workplace.

At the end of this session, participants will be able to:

- ✓ Identify and apply the top employee motivators,
- ✓ Describe how to engage a multigenerational workforce and use an in quiry-based approach to prevent conflict.

#### TORY VISSER

Human Resources Consultant LabCorp/Dynacare Laboratories Seattle, WA

### This session is sponsored by the Laboratory Corporation of America/Dynacare Northwest, Inc.

Session #18

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

## Clinical Cellular Analysis "Beyond the Cube"; Research Population Data

This presentation will give Hematologists a look into the research being done on the clinical benefits of utilizing Research Population Data (RPD) through VCS technology. Being able to analyze cells in their near-native state has provided researchers with an opportunity to take hematology analysis "beyond the cube". This research caught on, and there are now many published studies that show that when VCS analysis is optimized, the changes in the WBC cell population data appears to correlate with the presence of abnormal cells (Disease State Management). WBC Research Population Data has been studied in clinical cases of various disease states including Sepsis, CLL, Malaria, Lymphoproliferative Disorders, and MDS. Several case studies will be discussed that illustrate these correlations. Hematologists will have an opportunity to see the hematological analytical process in a whole new light.

At the end of this session, participants will be able to:

- ✓ Identify normal and abnormal Hematology results, scatterplots, and cell types,
- ✓ Correlate abnormal results with peripheral smear morphology, and
- ✓ Identify the benefits of Research Population Data information for decision rule criteria.

#### NICOLE HAMMING C.L.S. MT(ASCP)

Hematology Field Product Specialist Beckman Coulter, Inc. Huntington Beach, CA

#### This session is sponsored by Beckman Coulter, Inc.

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

### Session #19

Outrageous and Contagious: Amazing Cases from our Clinical Microbiology and Infectious Disease Collection

Dr. Susan Butler-Wu (University of Washington), Dr. April Abbott (University of Washington), Dr. Steve Mahlen (Madigan Army Medical Center), and Dr Jill E. Clarridge, III (University of Washington) will team together to present numerous cases that will teach and amaze you. These are guaranteed to make you the life of the party in the retelling.

At the end of this session, participants will be able to:

- ✓ Discuss the significance of microbiological findings in patient treatment,
- ✓ Discuss the importance of the interaction between the microbiology department and the healthcare provider.

#### Coordinator

#### JILL E. CLARRIDGE, III, PH.D., D(ABMM), F(AAM)

Professor, Laboratory Medicine, Univ. of Washington Chief, Microbiology, Serology and Molecular Diagnostics Puget Sound HCS, Veterans Affairs Seattle WA

### Session # 20

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

#### Bringing UA into the 21<sup>st</sup> Century Automating UA

In the session on Automating Urinalysis, the speaker will address the reasons for automation and how to determine if it is good fit for your laboratory. Various kinds of automation options will be discussed.

In Bringing UA into the 21<sup>st</sup> Century, the speaker will present a history of urinalysis and review the forces shaping today's laboratory. The speaker will give a general overview of LEAN principles and discuss ideas for justification of urinalysis automation.

At the end of this session, participants will be able to:

- Recognize important issues shaping today's laboratory and how automating UA impacts the laboratory,
- ✓ Discuss various automated platforms and determine which might be the best fit for their laboratory, and
- ✓ Discuss how to use LEAN principles when doing urinalysis and how automating urinalysis would affect the whole laboratory.

#### LINDA MCGOWAN

Clinical and Customer Care Specialist Iris Diagnostics Chatsworth, CA

#### This session is sponsored by IRIS Diagnostics.

16

8:30 AM - 12:00 PM 3 Contact Hours Intermediate

### Session # 21

#### **All About Phlebotomy**

8:30 AM - 12:00 PM 1:00 PM - 4:30 PM 6 Contact Hours Intermediate

During this full-day phlebotomy update, a panel of presenters will discuss microcollection procedures including finger and heel stick collections, tips for difficult venipunctures with a review of proper technique including proper use of safety equipment, opportunities within the laboratory for phlebotomists, and maintaining specimen integrity during phlebotomy and processing procedures. There will be ample time for questions and discussion of topics that are identified by the participants.

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

- ✓ Discuss microspecimen collection techniques,
- ✓ Discuss proper phlebotomy safety techniques and equipment, and
- ✓ Discuss the potential expanded roles for phlebotomists in today's laboratory.

#### TRICIA CASSIDY, MT(ASCP)

Sales Consultant & Field Sales Trainer BD Diagnostics Seattle, WA ERIKA FERRERI Instructor

Edmonds Community College Edmonds, WA

### Sylvia Crawford

Instructor Bellevue Community College Bellevue, WA This Session is sponsored by BD Diagnostics

### Session # 22

1:00 - 4:30 PM 3 Contact Hours Intermediate

## Competency Training and the Future of Clinical Laboratory Science Education

The speaker will discuss the challenges and innovations to implement an effective program to access the technical competency of laboratory personnel. Dr. Sealfon will discuss the importance of implementing a successful annual competency assessment program and discuss corrective action interventions needed when an employee scores sub-optimal performance on annual competency reviews.

The benefits and challenges of becoming a clinical site for the Medical Laboratory Scientist (MLS) and Medical Laboratory Technician (MLT) training programs will be discussed. Dr. Sealfon will discuss the importance of enhancing the clinical experience for students and provide suggestions on how to provide a positive clinical experience for students training in your facility.

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

- ✓ Describe the challenges and innovations to annual technical competency review,
- ✓ Describe the components of a successful annual competency training program for technical laboratory staff,
- $\checkmark$  Discuss how to handle sub-optimal technical employee competency performance,
- ✓ Discuss the benefits and challenges of becoming a clinical training site for the MLS and/or MLT training programs, and
- ✓ Discuss how to provide a positive experience for MLS and/or MLT students training in your facility.

#### MICHAEL S. SEALFON, PHD, BABCC, MT(ASCP)

MLT Program Coordinator Renton Technical College Renton, WA

### Session # 23

**Complex Hemostasis Testing Made Simple** 

Effective solutions to simplify the monitoring of heparin therapy along with solutions to recent CLSI hemostasis testing guidelines and expanding Thrombophilia screening through simplified molecular testing in the hemostasis laboratory will be discussed. New advances in hemostasis testing will also be presented to meet the challenges of screening for Antiphospholipid Symdrome as well as testing for Heparin Induced Thrombocytopenia

At the end of this session, participants will be able to:

- ✓ Outline current heparin monitoring guidelines,
- ✓ Review current CLSI recommendations for PT/INR testing, and
- ✓ Explain current molecular testing requirements for Thrombophilia testing.

JIM DEMASE Marketing Manager-Hemostasis Beckman Coulter Inc Brea, CA

This session is sponsored by Beckman-Coulter, Inc.

Session #24

1:00 - 4:30 PM 3 Contact Hours Intermediate

#### Maximizing the Effectiveness of Microbiology Testing: Improving the Consultative Feel of the Laboratory

This speaker will present information on implementation of guidelines for submission of proper microbiology specimens, discuss the use of appropriate post-analytical comments, and discuss how to optimize patient outcomes through a combination of good laboratory practices and the use of interpretive reporting. The speaker will also review ways to reduce the work burden by implementation of efficient work practices. Case studies and patient reports will be used to present the material along with a question and answer session.

At the end of this session, participants will be able to:

- ✓ Implement guidelines for acceptance of proper specimens for clinical microbiology testing,
- ✓ List post-analytical comments that would be appropriate for use in your laboratory,
- Optimize good patient outcomes through a combination of good laboratory practices and use of interpretive reporting, and
- ✓ Reduce the work burden by implementation of efficient work practices.

#### **ANNETTE MONTERRUBIO**

Technical Applications Specialist Siemens Healthcare Diagnostics Deerfield, IL

This session is sponsored by Siemens Healthcare Diagnostics.

1:00 - 4:30 PM 3 Contact Hours Intermediate

### Session #25

DNA Testing in Forensic Specimens

Forensic Science is one of the most popular topics in U.S. pop culture today, yet many people still ask "is it the same as TV?". This presentation will focus on basic principles of DNA testing in the forensic setting. It will highlight some of the major issues facing the forensic laboratory and some of Washington's most interesting cases.

At the end of this session, participants will be able to:

- ✓ Define forensic science,
- ✓ Recognize the connection between the clinical and forensic laboratories, and
- ✓ Discuss the use of DNA technologies in the forensic setting.

MARIAH Low, BS Forensic Scientist Washington State Patrol – Marysville Crime Laboratory Tulalip, WA

The 2010 Spring Seminar Program and registration form are available on the Internet at the following URL

www.asclswa.org

Updates and other information will be provided on this site.

1:00 - 4:30 PM 3 Contact Hours Intermediate

#### **Registration Terms and Conditions**

Fees are listed for each category. To ensure adequate processing time, please postmark your registration by March 31, 2010. Handouts or lunch will not be guaranteed to on-site registrants.

Lunch is included in the registration fee for persons who are preregistered for **an AM and a PM session** on the same day. Lunch is <u>not</u> provided for registrants that sign up only for an AM <u>or</u> PM session or who register on-site.

#### **Attendance Categories**

**Member:** Any person who is a current member in good standing of the American Society for Clinical Laboratory Science (ASCLS) or the American Medical Technologists (AMT). Please list your membership number in the appropriate space on the registration form. Anyone joining ASCLS and mailing both pages of the completed membership application with your registration form to Jeanne Johnson is eligible for member rates. Please include both pages of the membership application along with your check payable to ASCLS.

**Student:** A student is defined as any person who is engaged at least half-time in a recognized program leading to either an associate's or bachelor's degree in a clinical laboratory science or one who is in a recognized Clinical Laboratory Internship program.

**Phlebotomist:** A phlebotomist is defined as any person whose primary responsibility is phlebotomy. AMT's RMA are eligible for Phlebotomist Member fees.

**Payment**: Full payment in U.S. Dollars must accompany all registrations. Please submit a check for the appropriate payment according to the category that you qualify for. Those registrations without full payment will be held and the registrant notified. Checks must be made payable to "Spring Seminar." The bank will not accept checks made payable to any other name. The registration will not be processed until full payment made out to Spring Seminar is received in U.S. Dollars. No unpaid registrations or credit card registrations can be accepted.

The seminar committee reserves the right to limit registration and cancel any session prior to the seminar should circumstances make it necessary. If a session is cancelled, the registrant may attend another session or receive a refund. Otherwise, due to convention center and session expense obligations, NO REFUNDS are permitted.

#### **Registration Questions**

For registration questions or information contact:

Jeanne M. Johnson 10844 2nd Ave SW Seattle, WA 98146

Phone: 206-246-7081 E-mail: j1953j@clearwire.net

NOTE: Phone calls will be returned either in the evening after 5:00 PM or on weekends. Be sure to include your day and evening phone numbers on the registration form on the following page.

If you wish to receive a confirmation, please include a self-addressed, stamped envelope. You may also request an emailed confirmation. Please write your email address clearly. Note that confirmations are only sent upon request and are not automatically sent for each registration.

#### PLEASE PRINT AND SHOW NAME AS WANTED ON NAME TAG

First Name				Last Name				
Address								
City/State/Zip								
Day Phone				Evenir	ng Phone	e		
Institution								
City/State								
E-Mail Address								
Please circle sessions you wish to attend		Thursday AM April 22		1	2	3	4	Alternative to session 4 if filled, session
			РМ	5	6	7	8	
Would you be willin Moderator for any of th	g to serve as ne sessions you	Friday	АМ	9	10	11	12	
will be atten Please circle re Yes	ding? esponse. No	April 23	РМ	13	14	15	16	
		Saturday	AM	17	18	19	20	21
		April 24	РМ	22	23	24	25	21

#### ADVANCED REGISTRATION FEE SCHEDULE (All Full-Day Preregistration INCLUDE Lunch)

Member ASCLS or AMT	(Membership #: ASCLS	AMT	)		
Technical/Admi	nistrative Professional				
	Full Day		days	@ \$80.00	\$
	Half Day		half days	@ \$40.00	\$
Phlebotomist/R	MA/COLT			-	
	Full Day		days	@ \$40.00	\$
	Half Day		half days	@ \$20.00	\$
Student	,			0	
	Full Day		days	@\$40.00	\$
	Half Day		half days	@ \$20.00	\$
NonMember	,			0	
Technical/Asmir	nistrative Professional				
	Full Day		days	@\$150.00	\$
	Half Day		half days	@ \$75.00	\$
Phlebotomist	,		,	0	
	Full Day		days	@ \$70.00	\$
	Half Day.		half days	@ \$35.00	\$
Student	2				
	Full Day		days	@ \$40.00	\$
	Half Day		half days	@ \$20.00	\$
	Total				\$

Mail to:

Jeanne M Johnson 10844 2nd Ave SW Seattle, WA 98146 Full Payment must accompany all registrations. Remit in U.S. dollars. Make check payable to **Spring Seminar.** 

#### Special Promotion for <u>New Members</u> Only ... 15 months for the price of 12.

APPLICATION FOR MEMBERSHIP American Society for Clinical Laboratory Science						
Name	Date of Applic tion	ica-				
Company	Department					
Address	City/State Zip	p				
E-mail Address	Telephone	Fax				
Home Address	City/State/Zip	р				
Home Phone						
Check here if you want to	receive your ASCLS mail at home					

Scientific Ass	ombly		CERTIFICATION AGENCY - Circle the corresponding credentia				ng credential	
Scientific ASS			ортаілеа; спеск ан тлат арріу.					
The ASCLS Scientific Assembly sectons provide an op-			(4)		NCA _	(a) CLS	(b) CLT	(c) other
portunity for n	nembers to no	etwork within their own scien-	(5)		AMT	(a)MT	(b) MLT	(c) other
Please choose	e one primary	and one secondary interest.	<b>.</b> (6) ASCP (a) MT (b) MLT (c)			(c) other		
Primary	Secondary Ir	nterest	(7)		HHS _		(b) CLT	(c) other
(01)	(01)	chemistry/urinalysis	(9)		Other			
(02)	(02)	microbiology	<u>P</u>	OSITIO	<u>N</u> - Circle	e one		
(03)	(03)	laboratory administration	(F	) Lab D	irector (A	Admin)		
(04)	(04)	immunology/immunohematol-	(N	I) Lab M	lanange	r		
		ogy	(A	) Tech.	Supervis	sor		
(06)	(06)	histology/cytology	(N	I) Staff	Technolo	gist (CLS)		
(07)	(07)	hematology/hemostasis	(4) Staff Technicial (CLT)					
(08)	(08)	generalist/public health	(t) Phelbotomist					
(09)	(09)	industry	(6	) Labor	atory Ass	sistant		
(10)	(10)	education	(1)	Faculty	y Membe	er/Instructor		
(11)	(11)	phlebotomy/POC	(K) Program Director					
(12)	(12)	molecular	(L	) Consu	ultant			
(13)	(13)	molecular bio/genetics	(U) Inspector/Sales					
(14)	(14)	consultant	(2	) Marke	eting/Sale	es		

Please assist ASCLS in collecting the following voluntary statistics to provide analysis of professional trends: Employment Status: \_\_FT \_\_PT \_\_STU \_\_Unemployed \_\_Retired Highest Degree: \_\_H.S. \_\_Assoc. \_\_Bach \_\_Masters\_PhD Year of Birth: \_\_\_\_ Sex \_\_F \_\_M Race (please circle one) Caucasian / American Indian / Alaskan Native / Asian/Pacific Islander / African American / Hispanic / Other

Contributions or gifts to ASCLS and ASCLS/PAC are not deductible as charitable contributions for federal income tax purposes. However, dues payments may be deductible by members as an ordinary business expense. ASCLS estimates that 9% of your dues will be spent on lobbying, and therefore this portion will not be deductible on your federal income taxes

#### Special Promotion for <u>New Members</u> Only ... 15 months for the price of 12.

ASCLS Membership Categories and Eligibility Requirements

**PROFESSIONAL** (*full voting privileges*) is open to all persons certified or engaged in the practice and/or education process of the clinical laboratory science, including those with an active interest in supporting the purposes and goals of this Society. Membership benefits are dependent on level of membership:

**PROFESSIONAL I** includes basic benefits plus the award winning journal, CLS. **PROFESSIONAL II** includes basic benefits only.

National Dues: Professional I - \$97; Professional II - \$75; plus State Dues: \$10 for WA, OR, or ID

**COLLABORATIVE** (*Non-voting privileges*) is available to any individual who currently holds membership in any other *health related national organization* **AND HAS NEVER BEEN A MEMBER OF ASCLS**. Health related national organization membership:

National Dues only: \$45

**FIRST YEAR PROFESSIONAL** (*full voting privileges*) Open to persons who have graduated within the last twelve months from an accredited program in laboratory science. Prior student membership with ASCLS is not a prerequisite. This membership status is valid for only one year to assist recent graduates. After one year in this category, members are upgraded to Professional membership.

National Dues: \$40.00 plus State Dues: \$10 for WA, OR or ID

**STUDENT** (*non-voting privileges*) Open to persons enrolled in a structured program of training or academic instruction in clinical laboratory science, or to full-time graduate students in related science area.

National Dues: \$25.00 no state dues in WA, OR, or ID

Persons residing outside of the U.S. are only eligible for the Professional I category.

I wish to join ASCLS as a	member.
(Students, please list your expected date of graduation:	Mo/Yr.)
Membership dues: + State dues: = Tota	al payment enclosed
Mathad of Baymanty (U.S. Eunda Only)	

method of Payment: (0.5. Fun	ius Oniy)		
Check (payable to ASCLS)	Visa	_ MasterCard	Amex

Exp. date	
Card #	
Name on card	

Signature\_\_\_\_\_

Please send both pages of the completed application to Jeanne Johnson to assure that you will receive 15 months for the price of 12. Please prepare a separate check to ASCLS if you are paying by check; do not include this fee in your registration payment.

### Sessions at a Glance

Thursday, Apr	il 22, 2010	Friday, Ap	ril 23, 2010	Saturday, April	24, 2010
AM	PM	AM	PM	AM	PM
8:30 - 12:00	1:00 - 4:30	8:30 - 12:00	1:00 - 4:30	8:30 - 12:00	1:00 - 4:30
1 Microbial Nucleic Acids Antibiotic Susceptibility Phenotype vs Genotype	5 Patient Safety and the Clinical Lab	9 Personnel Management, Enhance Quality of Workforce	13 HbA1C in Diabetes Screening Hemoglobin- opathies and Thallassemia Testing	17 Motivating and Engaging Employees	22 Competency Testing and Future of Lab Science Education
2 Breast Cancer Biomarkers Early Sepsis Bio- markers BNP in ACS and Heart Failure	6 Emerging Infectious Diseases	10 Magnificent Morphology	14 Stem Cell Grafts Bone Marrow Overview	18 Clinical Cellular Analysis Beyond the Cube	23 Complex Hemostasis Made Simple
3 Molecular Hematopathology Select Myeloid and Lymphoid Malignancies	7 Reticulocyte Hemoglobin Content Platelet Function Testing	11 Mycology Review 101	15 Parasitology Review 102	19 Outrageous and Contagious Microbiology	24 Maximizing Effectiveness of Microbiology Testing
4 Proficiency Testing Regulations Session Limited to 30	8 Serum Free Light Chain Testing	12 Genetic Testing for Personalized Drug Therapy and Disease Eval	16 From Arachidonic Acid to Oxidixed LDL	20 UA into 21st Century Automating UA	25 DNA Testing in Forensic Specimens
				21 All About Phlebotomy	21 Phlebotomy cont.

Spring Seminar Registration Jeanne M Johnson 10844 2nd Ave SW Seattle, WA 98146

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