2009 Northwest Medical Laboratory Symposium



AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE, REGION IX ASCLS-WASHINGTON ASCLS-OREGON

American Medical Technologists, Western District Oregon State Society of American Medical Technologists Northwest State Society of American Medical Technolgoists

> DoubleTree Hotel Seattle-Tacoma Airport Seattle, WA October 21 - 24, 2009

Invitation To Attend the 2009 Northwest Medical Laboratory Symposium

The allied health field is a fast-changing environment. In order to be a viable, employable professional in the laboratory today, you must stay on the cutting edge of technology. It is our pleasure to invite you to come join us at the DoubleTree Hotel at SeaTac for the 2009 Northwest Medical Laboratory Symposium. Not only will you have an opportunity to attend excellent continuing education seminars on a variety of subjects, view the latest in laboratory equipment and instrumentation; but you will also have the opportunity to network with fellow laboratory professionals to discuss one-on-one how they are managing day-to-day challenges in their laboratory.

For many of us working in the laboratory today, the skills we were so proficient at, and practiced at the beginning of our careers, are no longer even taught, except as "once upon a time." Only by staying current through continuing education can you remain competitive and competent in your chosen field and not end up extinct like the dinosaur. The challenge of daily changing technology is part of what makes our career so exciting and one worth doing for over 30 years. The Northwest Symposium is an excellent way to gain knowledge, stay current, and have fun doing it. The seminars promise to offer topics to meet everyone's needs. Be sure to tour the exhibit hall and talk to the vendors, and remember, the more time you spend visiting the exhibits, the better chance you have of winning a prize. Please make a point to tell each and every vendor "thank you" for being there, and for helping sponsor speakers and breaks for the Symposium.

So, please come join us at the DoubleTree Hotel for the 2009 Northwest Medical Laboratory Symposium to learn, network and have a great time!

Mary Lashinski, CLS(NCA) Director, ASCLS Region IX Barbara E. Ware, MT(AMT) AMT Western District Councilor



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At A Glance

The 2009 Northwest Medical Laboratory Symposium Program and registration form are available on the Internet at the following URL

www.asclswa.org

Updates and other information will be provided through this site.

NWMLS Committee

ASCLS - Region IX

General Chair	Molly Morse	Regional Director	Mary Lashinski
Program	Lisa McDonnel (Chair) Boniamin Chan	Region IX Forum Fric	lay, October 23, 2000 6:30 - 7:30 PM
	Eenjamin Chan Lynn Emmert Roxann Gary Justin Kwong Anne McTee Jack Messner Andres Moon Leslie Nakagawa Denver Niles	ASCLS-OR President President Elect Secretary Treasurer Past President ASCLS-OR Board Mee	Sarah Erhardt Open Open Krista Moore Brenda Lawing
	Ngoc-Diep Pham Brian Poon Donna Reinbold Sigrid Reymond	Friday, October 23, 200 ASCLS-Washington President	09 Follows Region IX Forum n Molly Morse
	Victoria Robbe Michael Sealfon Linda Wilkins	President Elect Secretary Treasurer Past President	Sue Seegers Mike Gauke Mary Helen Carroll
Exhibits	Bill Eng Roxanne Erskine	ASCLS-WA Board Meeting Friday, October 23, 2009 Follows Region IX Foru	
Registration	Jeanne Johnson Jenny Bendig Mi-Lim Kim	CLSA President President Elect Past President	Jill Jefson Pam Jett Shellie Smith
Program Design	Brenda Kochis	Mastern D	intrint of American
Finance	Toni Okada	Western D Medical Te	chnolaists Officers
A/V	Quincy Lam	and Business Meetings	
Moderators	Sue Goss	Western District Council	llor Barbara Ware, MT(AMT)
Hospitality	Marianne Strnad	OSSAMT	
Sponsors	Quincy Lam	President President Elect	Marilyn Albertsen Doug Fisher
Handouts	Jack Messner	Secretary Treasurer	Audrienne Whitley Clifford Colvin
Webmaster	Brenda Kochis	Friday, October 23, 20 OSSAMT Board Meetin OSSAMT Business Me	009 ng 6:00 - 7:00 AM eeting 6:00 PM

NWSSAMT

President	
Vice President	
Secretary	
Treasurer	

Jo Abraham C. Ron Cato Susanna Hancock James Grettner

NWSSAMT Board Meeting and Business Meeting Friday, October 23, 2009 6:00 PM

General Information

Registration Hours

Wednesday	7:30 AM - 8:30 AM 1:30 PM - 2:00 PM
Thursday	7:30 AM - 8:30 AM 1:30 PM - 2;00 PM 6:30 PM - 7:00 PM
Friday	7:30 AM - 8:30 AM 1:30 PM - 2:00 PM
Saturday	7:30 AM - 8:30 AM 12:30 PM - 1:00 PM

Lunch

Wednesday	11:45 AM - 12:45 PM
Thursday Friday	11:45 AM - 11:45 PM 11:45 AM - 12:45 PM
Saturday	12:00 AM - 1:00 PM

Note: Lunch is provided only with full-day preregistrations. Either an all-day session or two halfday sessions on the same day constitute a full-day registration. Lunch is not provided with halfday registrations, or with on-site registrations. A half-day session and a Thursday evening session do NOT count as a full-day. A full-day is a morning and afternoon session on the same day only.

Coffee Breaks

Fifteen minutes each

Wednesday	10:00 AM - 10:15 AM 3:30 PM - 3:45 PM
Thursday	10:00 AM - 10:15 AM 3:30 PM - 3:45 PM
Friday	10:00 AM - 10:15AM 3:30 PM - 3:45 PM
Saturday	10:00 AM - 10:15 AM 2:30 PM - 2:45 PM

Session Times

Wednesday	8:30 AM - 11:45 AM 2:00PM - 5:15 PM
Thursday	8:30 AM - 11:45 AM 2:00 PM - 5:15 PM 7:00 PM - 9:00 PM
Friday	8:30 AM - 11:45 AM 2:00 PM - 5:15 PM
Saturday	8:30 AM - 11:45 AM 1:00 PM - 4:15 PM

Exhibit Hours

11:30 AM - 2:00 PM

11:30 AM - 2:00 PM Thursday 5:00 PM - 7:00 PM

Friday 11:30 AM - 2:00 PM

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 of note of the P.A.C.E.® number and of 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.



Seattle-Tacoma Airport 18740 Pacific Highway South Seattle WA 98188 Phone: 206-246-8600 Fax: 206-431-8687

Northwest Medical Laboratory Symposium October 21 - 24, 2009

Room Rates: \$152.00 (single and double rate) plus fees, taxes and assessments , currently 12.4%. (special rate held until October 5th)

Check-in time is 3:00 PM and check-out time is 12:00 noon. The hotel can store your bags if you check out prior to the end of your session.

Please call the hotel at 800-222-TREE or 206-246-8600 to make a reservation. State that you are with "Northwest Medical Laboratory Symposium" to receive the conference room rate. Conference room rate will be available until Monday, October 5, 2009. Reservations received after October 5th are subject to availability at the standard rates.

NOTE: People registering by Sept. 10th will have their name put in a drawing to win either a Hilton Honors points give-away or receive airline mileage points.

Register by October 5th to receive the conference room rate, and by September 10th to be automatically entered into a raffle for HHpoints or airfare.



Directions:

From Seattle/Tacoma International Airport

Follow sings to Highway 99 (International Boulevard) Turn right onto International Boulevard Turn left at first light (188th Street) into the DoubleTree Hotel Parking lot.

From I-5 North or South

Take exit # 152 (188th Street/Orilla Road) The DoubleTree Hotel is located 1 mile West of I-5 on the right hand corner of 188th and International Boulevard

From I-405 South

Follow I-405 to the I-5 interchange Follow I-5 South and take exit #152 (188th Street/Orilla Road) The DoubleTree Hotel is located 1 mile West of I-5 on the right hand corner of 188th and International Boulevard.

Airport: Our complimentary airport shuttle picks up on the 3d floor of the airport garage and runs every 15 minutes on the hour, 24 hours per day

Session # 1 8:30 - 11:45 AM 3 Contact Hours Intermediate

Cytology of Body Fluids

Ever feel like you lack confidence in evaluating body fluid morphology? In this popular session, Dr. Sabath will cover the pathophysiology of body fluids formation, major diseases associated with abnormal effusions, chemical and cellular composition, and requirements for body fluid analysis in clinical labs and cytology laboratories. Emphasis will be on the cellular component, including methods for cytologic preparation and examination, cyto-morphologic features of malignancy, classical patterns of common diseases in cytology, and problems in evaluating mesothelial cells. As time allows, special topics in body fluids may also be addressed including CSF, synovial fluids, and semen analysis.

Core Track

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

- ✓ Discuss the pathogenesis of body fluid formation.
- List collection requirements for various laboratory determinations done on body fluids.
- Correlate chemical changes in body fluids which occur in various disease states.
- Describe methods of specimen preparation for body fluid morphology.
- ✓ Identify normal and abnormal cells in each body fluid.

DIANA JORDAN, MD

Assistant Professor University of Washington Medical Center Seattle, WA

Session # 2 8:30 - 11:45 AM 3 Contact Hours Basic

Communicate, Collaborate, and Include

Being successful in the workplace often times comes down to the ability of people to communicate and collaborate effectively with the people they work with. Many times we exclude a co-worker from being able to fully contribute simply by the way we speak or how we use our body language. A breakdown in communication can result in frustration, lack of results and misunderstandings. Using experiential education exercises, participants will explore collaborative communication techniques that provide them with a fresh perspective on communication, collaboration and inclusion of others.

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

- Evaluate when they are using collaborative skills or not, in communicating with others.
- ✓ Identify opportunities for using collaborative techniques in their daily work.
- ✓ Improve their ability to be more effective in including others.

DIANNE BROOKS

Catalyst: Education, Organizational and Leadership Development Brooks Consulting Eatonville, WA

BARBARA DEANE, BA, MA

Training Director and Writer The GilDeane Group, Inc Seattle, WA

JULIE REIMER, BS, MS

Education and Development Supervisor Puget Sound Blood Center Seattle, WA

Session # 3 8:30 - 11:45 AM 3 Contact Hours Intermediate

Mechanisms of Antimicrobial Drug Resistance: Recognition and Methods of Detection

The goal of the lecture is to present information about current problems in antibiotic use and emerging resistance. Understanding the mechanisms of drug resistance to microbial organisms will help clinical microbiologists to recognize and detect resistant clinical isolates. Proper selection of batteries of antibiotics against specific organisms using proper methods will be emphasized. Various new or modified tests that are available, and their limitations, will be addressed.

The 3-hour session will include:

Background and significance of antimicrobial resistance. Antimicrobial resistance in Gram-positive bacteria (including cases). Antimicrobial resistance in Gram-negative bacteria (including cases).

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

- $\checkmark~$ Discuss an overview of antibiotic classes and drug actions.
- ✓ Explain an overview of emerging antibiotic drug resistance.
- ✓ Describe and evaluate laboratory methods for detection of drug resistance.

XUAN QIN, PHD, D(ABMM)

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

LC-MS: Using Vitamin D as a Case Study

In January 2009, The New York Times reported on a major laboratory testing recall for falsely elevated 25-hydroxy vitamin D levels. The recall appropriately raised concerns regarding highly complex mass spectrometric methods. Currently, there are no available external proficiency testing programs for vitamin D in the United States, and, while the NIST is developing a standard reference material, it has not yet been formulated and released. Therefore, laboratories must design their own calibrators and proficiency testing programs. In this session we will discuss the current status of Vitamin D testing and how mass spectrometry can be applied to its quantification. There will also be discussion of proper quality control approaches to ensure accurate results.

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

- ✓ Describe the current guidelines for Vitamin D testing.
- \checkmark Identify how analytes are specifically identified in the mass spectrometer.
- ✓ List three easy quality control parameters for any LC-MS/MS assay.

ANDREW HOOFNAGLE, MD, PHD

Assistant Professor and Director, Clinical Mass Spectrometry University of Washington Seattle, WA



Session # 4 8:30 - 11:45 AM 3 Contact Hours Intermediate

Session # 5 2:00 - 5:15 PM 3 Contact Hours Intermediate

Diagnoses Originating in the Peripheral Blood Smear



This session will be a case driven discussion of various diagnoses (both neoplastic and non-neoplastic) in hematology that originate from clues identified in the peripheral blood smear.

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

- ✓ Identify clues to systemic disease that originate in the peripheral blood smear.
- Evaluate the morphology of normal and abnormal cells seen in the peripheral blood smear.
- ✓ Correlate the morphology and implications of normal and abnormal cells seen in the peripheral blood smear.

SINDHU CHERIAN, MD

Assistant Professor, Dept. of Laboratory Medicine University of Washington Seattle, WA

Session # 6 2:00 - 5:15 PM 3 Contact Hours Intermediate

Genetic Testing of Blood Groups

The genetic basis of blood groups has been elucidated over the preceding decades. As molecular technology advances, methods to determine blood groups for patients and blood donors have grown in use in the clinical laboratory. In this session, interesting cases will be used to illustrate the molecular basis of the ABO, Rh, Duffy, Kidd and Diego blood group systems. Participants will gain understanding of how changes at the genetic level cause red cell phenotype (serological) alterations, and how this may affect transfusion management.

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

- ✓ Describe uses for genetic testing of different blood group systems.
- Discuss how serological and molecular testing for blood groups can be complementary to each other.
- ✓ State indications for molecular testing of blood groups.

MEGHAN DELANEY, DO

Medical Director, Genomics Laboratory Puget Sound Blood Center Seattle, WA

LAKSHMI GAUR, MSc, PHD

Associate Member, Genomic Research Laboratory Assistant Professor, Dept of Laboratory Medicine University of Washington Seattle, WA

Session # 7 2:00 - 5:15 PM 3 Contact Hours Intermediate

Training the Trainer

Effective job skills training is a process that requires specific actions and commitments by managers, trainers, and learners at three stages: before, during, and after the training event. The most highly effective training also seeks to encourage the learner's professional development by providing an environment that enables learning to occur.

This workshop incorporates current knowledge about adult learning principles into more conventional job training methods that will engage the learner's motivation to excel.

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

- \checkmark Identify the skill set for effective trainers.
- ✓ Self-assess their own current level of skill as a trainer.
- ✓ Identify the training needs of individuals for performing specific tasks.
- ✓ Recognize different learning styles and customize the training approach.
- ✓ Apply adult learning principles to training situations.
- \checkmark Use the Job Instruction method to train someone in a given task.
- ✓ Determine if learning has occurred.
- ✓ Evaluate the level of learning that has occurred.
- ✓ Document training activities.

SUSAN BRANDT, MA, SPHR

Senior HR Specialist Washington Employers, Inc. Kent, WA

Session # 8 2:00 - 5:15 PM 3 Contact Hours Intermediate

Hepatitis B and C: Epidemiology, Diagnosis, Treatment, and Laboratory Testing

The speakers will describe the epidemiology, diagnosis, treatment, and laboratory testing of Hepatitis B and Hepatitis C, including prevalence, CDC testing guidelines, clinical consequences of infection, and various antibody and molecular testing techniques.

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

- ✓ Describe the transmission, clinical course of Hepatitis B and Hepatitis C.
- ✓ Describe the diagnosis and treatment of these infections.
- ✓ Describe the laboratory testing of hepatitis.

JASON A. DOMINITZ, MD, MHS

Director NW Hepatitis C Resource Center VA Puget Sound Health Care System University of Washington School of Medicine Seattle, WA

Amanda Harrington, PhD

VA Puget Sound Health Care System Seattle, WA

CHIA WANG, MD, MS

Clinical Assistant Professor of Medicine Virginia Mason Medical Center Seattle, WA

Thursday, October 22, 2009

Session # 9 8:30 - 11:45 AM 3 Contact Hours Intermediate

Managing Preanalytical Variables



This is an intermediate course intended for phlebotomist, laboratorians, nurses and other healthcare professionals responsible for the collection, handling, processing and diagnostic testing of specimens in the clinical laboratory. A basic knowledge of phlebotomy and clinical laboratory science is required. The objective/goal of the program is to provide an understanding of the importance of factors that influence preanalytical variables in specimen collection, processing/handling. Identify preanalytical sources of error and its impact. Focus will be placed on established guidelines, procedures and techniques for proper venipuncture, specimen collection, processing and handling.

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

- ✓ Recognize the importance of preanalytical variables in specimen collection. Identify the preanalytical phase as the time from test ordering until sample analysis.
- ✓ Understand and identify contributing factors in specimen collection, processing/han dling and the effect on laboratory testing.
- ✓ Use this knowledge to minimize occurrences of preanalytical error in their institution, enhance sample quality, accuracy of laboratory data and quality of patient care.

Troubleshooting Hemolysis

The issue of hemolysis has always plagued clinical laboratories and continues to be a growing concern. Hemolysis leads to a higher rate of rejected specimens and is a cause of frustration for both the lab and the nursing units. It can affect all areas in the laboratory and cause erroneous patient results. This presentation will discuss factors known to cause hemolysis and suggested collection techniques to improve the quality of specimen for clinical laboratory testing.

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

- ✓ Define and describe hemolysis
- ✓ Recognize & identify causes of hemolysis
- ✓ List the effects of hemolysis on test results
- ✓ Observe procedures that help reduce hemolysis.

TRICIA CASSIDY, MT(ASCP)

Sales Consultant and Field Sales Trainer BD Diagnostics Seattle, WA

Sponsored by BD Diagnostics Preanalytical Systems

Thursday, October 22, 2009

Session # 10 8:30 - 11:45 AM 3 Contact Hours Intermediate

Pediatric Acute Leukemia

The session is concentrated on acute leukemia in pediatric patients. The main objective will be on acute lymphoblastic leukemia, including its clinical presentation, laboratory diagnosis (morphology, flow cytometry, cytogenetics, and molecular genetics), treatment, and prognosis. Acute myeloid leukemia will also be presented but concentrated on the differences between adult and children. Finally, the characteristics of acute leukemia in Down Syndrome patients will be discussed.

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

- ✓ Discuss the diagnosis of acute lymphoblastic leukemia (ALL) in pediatric patients
- ✓ Identify differences between acute leukemias in pediatric and adult patients
- ✓ List characteristics of acute leukemia in Down Syndrome patients

MIN XU, MD, PHD

Medical Director of Core Laboratory Seattle Children's Hospital Seattle, WA

Session # 11 8:30 - 11:45 AM 3 Contact Hours Intermediate

No Culture Left Behind – Application of the Toyota Production System in a Microbiology Lab

Learn about continuous performance improvement (CPI) principles applied in a healthcare setting. Specific examples in our Microbiology Lab include improvement in Urine, Blood, and Stool culture processing.

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

- ✓ Demonstrate a general working knowledge of Toyota Production System principles.
- ✓ Describe the waste in any process and discern opportunities for improvement.
- ✓ Apply CPI to everyday work.

DORIS CRUZ, MT(ASCP)

Quality Improvement Specialist Seattle Children's Hospital Seattle, WA

ROSEMARY EVISON, MT(ASCP)

Clinical Lab Scientist Seattle Children's Hospital Seattle, WA

LYNN STAPP, MT(ASCP)

Microbiology Lab Supervisor Seattle Children's Hospital Seattle, WA

PUNAM VERMA, PHD, D(ABMM)

Director, Microbiology Virginia Mason Medical Center Seattle, WA

Thursday, October 22 2009

Session # 12 8:30 - 11:45 AM 3 Contact Hours Intermediate

Calcium Physiology and Laboratory Medicine

Abnormal calcium metabolism is very common in hospitalized patients, and calcium testing is frequently ordered by physicians for their patients. Dr. Baird will discuss the physiologic regulation of calcium, how calcium metabolism is disrupted in illnesses, and how calcium is measured in the clinical laboratory. This session will also focus on laboratory interventions that can reduce calcium test utilization and focus testing on the patients who need it most.

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

- ✓ Describe how the endocrine system regulates calcium in the human body
- ✓ Name and describe the two main techniques for measuring calcium in blood
- ✓ Describe situations where calcium measurement is either indicated or NOT indicated in patients, and outline a plan to reduce calcium measurement in a hospital setting.

Don't Forget! Visit the Exhibits

11:30 AM to 2:00 PM

GEOFFREY BAIRD, MD, PHD

Acting Assistant Professor, UW Department of Laboratory Medicine Director, Clinical Chemistry, Harborview Hospital Seattle, WA

Session # 13 2:00 - 5:15 PM 3 Contact Hours Intermediate

To Pee or Not to Pee; Urinalysis, a Review



This session will include a review of urinalysis dipstick reactions, interfering substances, and correlations to the microscopic sediment. We will also review and identify aids to identifying microscopic elements.

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

- ✓ Discuss the specific reactions on each of the dipstick pads, and common interfering substances.
- Correlate results from the dipstick to the presence of specific formed elements in the microscopic sediment examination.
- ✓ Distinguish among various formed microscopic elements.

MARY TYLLIA, MT(ASCP)

Clinical Instructor Providence Sacred Heart Medical Center and Children's Hospital Spokane, WA

Thursday, October 22, 2009

Session # 14 2:00 - 5:15 PM 3 Contact Hours Intermediate

Cardiac Disease and Advanced Chemiluminescence

This presentation will address the use of LOCI technology as well as its history and future potential. Cardiac markers will be used as examples of this immunoassay technology which utilizes singlet oxygen channeling to trigger chemiluminescence. The discussion will be enlarged to demonstrate the utility of several diagnostic markers in the risk assessment, diagnosis and treatment of several forms of cardiac dysfunction. Dr. Haley will review epidemiological trends in disease as well as emerging technologies to reduce the worldwide burden of cardiac morbidity and mortality.

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

- ✓ Discuss the principles of advanced chemiluminescence technology
- Describe the importance of analytical sensitivity and low level elevations in diagnostic markers
- ✓ Evaluate the relative risks of disease and the importance of proper prevention

NANCY J HALEY, PHD

Senior Clinical Specialist, Disease State Marketing Siemens Healthcare Diagnostics Armonk, NY

Sponsored by Siemens Healthcare Diagnostics

Session # 15 2:00 - 5:15 PM 3 Contact Hours Intermediate

Right Test, Right Time, Right Reflex/Critical Values—Who Needs to Know?

Laboratory Test utilization at the right time with a look at what tests can be eliminated and what tests should be added based on results with the goal of shortening the length of stay for the patients.

Who needs to know my critical values? Taking a look at the different departments and individuals needing to know laboratories critical values for best patient outcomes.

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

- ✓ Set up duplicate testing rules within LIS or HIS to prevent unnecessary testing
- ✓ Understand reflex testing that should be done to allow for continuous flow laboratory process.
- ✓ Understand who needs to know the critical laboratory values for continuity of care.

JERRY W. STAPLES, MT(ASCP)SBB

Director of Laboratory Overlake Hospital Medical Center Bellevue, WA

Thursday, October 22 2009

Session # 16 2:00 - 5:15 PM 3 Contact Hours Advanced

October is National Breast Cancer Awareness Month – come hear about the latest advances in the laboratory's role in breast cancer diagnosis, prognosis, and monitoring.

Molecular Testing in Breast Cancer: Will it Become Standard Practice?

Dr Allison will discuss the use of recent PCR-based molecular testing in breast cancer with an emphasis on how gene expression profiling has impacted breast cancer diagnostics and clinical management.

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

- ✓ Identify the main breast cancer "subtypes" as defined by gene expression array data and compare them to traditional classification schemes.
- ✓ Discuss what traditional pathology tests are done in breast cancer to give prognostic and predictive information and how gene expression profiling tests have attempted to augment this.
- ✓ Describe the clinical utility of OncotypeDX testing. What specific subgroup of breast cancers is OncotypeDX appropriate for? What are the drawbacks to this test?

KIM ALLISON, MD

Assistant Professor, UWMC Department of Pathology Director of Breast Pathology University of Washington Medical Center Seattle, WA

Advances in Detecting Circulating Tumor Cells in Cancer

In many types of cancer, the presence of small amounts of residual tumor is associated with poor prognosis. For a long time, sensitive detection of minimal residual disease in hematological malignancies has been achieved with flow cytometry and molecular diagnostic tests. Detecting minimal residual disease in solid tumors has proven more challenging. Researchers have investigated various methods to detect circulating solid tumor cells, and recently an FDAapproved circulating tumor cell assay has become available. Comparison of this method with other methods will be made, and the clinical utility will be discussed.

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

- \checkmark Describe the incidence of various types of cancer
- ✓ List various ways of detecting minimal residual disease.
- ✓ Explain the impact of circulating tumor cells on disease prognosis.

DAN SABATH, MD, PHD

Associate Professor, Laboratory Medicine University of Washington School of Medicine Seattle, WA

Thursday, October 22, 2009

Don't Forget!

Visit the Exhibits

5:00 to 7:00 PM

Session # 17 7:00 – 9:00 PM 2 Contact Hours Intermediate

Assisted Reproductive Endocrinology

Dr. Sealfon will describe the various processes that contribute to Reproductive Endocrinology. Special emphasis will focus on the critical laboratory role in predicting the potential for a successful outcome, the number of viable eggs, and the progress of implantation.

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

- ✓ Determine which hormones are utilized in Assisted Reproductive Endocrinology.
- ✓ Interpret the results of reproductive hormone assays.
- ✓ Utilize results of reproductive hormone values as quality assurance indicators.

MICHAEL SEALFON, PHD, MT(ASCP)

MLT Program Director Renton Technical College Renton, WA

Session # 18 7:00 – 9:00 PM 2 Contact Hours Intermediate

Lab Medicine on the Front Lines

A parallel laboratory community exists – the Tri-Services Military Laboratory System. Could you effectively function as a Clinical Laboratory Scientist in Southwest Asia? Learn about epidemiological challenges and how to do more with a lot less!! Recent veterans from the combat zones will describe their unique and inspiring experiences.

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

- ✓ Describe the military blood component logistics system.
- ✓ Describe the state-of-the-art technology and techniques utilized in SW Asian military labs.
- ✓ Outline the challenges and responsibilities facing military clinical laboratory scientists.

LIEUTENANT COLONEL SUSAN ALLEYN, MS Chief, Ft. Lewis Blood Center Ft. Lewis. WA

Thursday, October 22 2009

Session # 19 7:00 – 9:00 PM 2 contact hours Intermediate

Integrated Oncology Care

In this session we will define and present the evolution of integrated cancer care. Next we will demonstrate how integrated medicine can enhance and decrease side effects of conventional cancer care. Lastly, we will present current trends in cancer survivorship initiatives.

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

- ✓ Define integrated cancer care.
- ✓ Discuss benefits of incorporating integrated medicine in cancer treatment plans.
- ✓ Define cancer survivor care needs and concerns.

JANILE MARTIN, ND, ARNP, LAC

Naturopathic Physician, Nurse Practitioner and Acupuncturist Red Cedar Wellness Bellevue, WA

Session # 20 7:00 – 9:00 PM 2 contact hours Intermediate

Patient Safety and Anticoagulants

Participants will learn about a pediatric hospital's experience of bringing together an interdisciplinary team to optimize patient safety with anticoagulants.

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

- ✓ List reasons why children are prescribed anticoagulants
- ✓ State how attending to anticoagulant dosing and monitoring improves patient outcomes
- ✓ Describe how laboratory tests are used to monitor anticoagulation and what interferes with test results

JENNIFER HRACHOVEC, PHARMD MPH

Anticoagulation Clinical Pharmacist Seattle Children's Hospital Seattle, WA

JENNIFER FREEBURG, PHARMD BCPS

Anticoagulation Clinical Pharmacist Seattle Children's Hospital Seattle, WA

> Need More Time to Browse? Visit the Exhibits Friday 11:30 AM to 2:00 PM

Friday, October 23 2009

Session # 21 8:30 - 11:45 AM 3 Contact Hours Intermediate

Hemostasis Overview



Are you cross-training in coag or perhaps could just use a good review of basic hemostasis? Do you feel "out of the loop" on some of the newer therapies being used to treat patients? Then this session is for you! This session will provide a general overview of bleeding and clotting disorders and the laboratory testing that is used in the diagnosis and management of these patients. Selected pharmaceutical agents used in the treatment of these disorders will also be discussed.

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

- \checkmark Discuss the evaluation of a bleeding patient.
- \checkmark Discuss the evaluation of a thrombotic episode.
- ✓ Discuss the mechanism of action of antithrombotic agents.
- Given a case history, select appropriate laboratory testing and interpret results to aid in the diagnosis and management of the patient's condition.

LYNN K. BOSHKOV, MD

Associate Professor; Director, Hemostasis & Thrombosis Associate Director, Transfusion Medicine Oregon Health & Science University Portland, Oregon

Session # 22 8:30 - 11:45 AM 3 Contact Hours Intermediate

Dirty Bombs, Suspicious Packages and Peanut Butter: The Washington State Public Health Laboratories Terrorism Response

The Washington State Public Health Laboratories is a Reference Laboratory in the Laboratory Response Network. This session will review the response capabilities of the State Lab to incidents of potential bioterrorism and chemical terrorism and will review the role of the clinical lab in such cases.

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

- ✓ Discuss the role of the State Lab in response to public health threats
- ✓ Compare the clinical labs' role in such responses
- ✓ Evaluate the need for preparedness training for public health threats

BRIAN HIATT, BS

Lead Microbiologist Food and Parasitology Laboratories

YOLANDA HOUZE, BS, SM(ASCP), RM, SM(NRCM)

Director of Microbiology, Bioterrorism Response Coordinator

DENNY RUSSELL, BS

Lead Microbiologist Emergency Response Team

CAROLINE WEST, BS

Chemist 3, Environmental Laboratory Services

Washington State Department of Health Shoreline, WA

Session # 23 8:30 - 11:45 AM 3 Contact Hours Intermediate

The Diagnosis of Genetic Disease

This session will present an overview of basic genetics concepts such as chromosomes, genes, mendelian and non-mendelian patterns of inheritance. More detailed discussion of chromosomal disorders, molecular genetic single gene disorders and biochemical genetic disorders including clinical presentations, diagnostic testing techniques, prenatal testing techniques and newborn screening issues will follow.

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

- ✓ Describe the fundamental concepts of the genetic basis of disease including genes chromosomes and patterns of inheritance.
- Appreciate different genetic testing methodologies, appropriate uses and basic interpretation of results.
- Discuss the principles of population screening from a public health perspective, specifically current issues in newborn screening.

LAWRENCE MERRITT, MD

Assistant Professor/Attending Physician University of Washington Seattle Children's Hospital Seattle, WA LISA SNIDERMAN KING, M.Sc., C.G.C. Lecturer, Genetic Counselor University of Washington Seattle Children's Hospital Seattle, WA

Lupus – multiple organs, multiple lab tests

Systemic lupus erythematosus (SLE) is a systemic autoimmune disease with many faces. Patients can present with different symptoms and the course of the disease is variable. This can make diagnosing and monitoring disease activity challenging. Learn more about the clinical presentation of this disease, how it is diagnosed, and the laboratory tests that are often used. In addition, you will hear about promising new markers of disease activity.

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

- Discuss the approach used to diagnose systemic lupus erythematosus (SLE) and the common clinical features seen in SLE.
- Correlate fluctuating disease activity with which tests are available to monitor disease activity.
- ✓ Describe limitations of biomarkers for disease activity, and how they are evaluated.
- State the principles of the methods used to screen for and identify autoantibodies asso ciated with SLE (immunofluorescence, ELISA, and multiplex methods) and the advan tages and limitations of these methods.

KATHY HUTCHINSON, MS, MT(ASCP)

Clinical Immunology Laboratory Supervisor University of Washington Medical Center Seattle, WA

ANNE STEVENS. MD, PHD

Associate Professor, Pediatric Rheumatology University of Washington Center for Immunity and Immunotherapies Seattle Children's Research Institute Seattle, WA Don't Forget! Visit the Exhibits 11:30 AM to 2:00 PM

Session # 24 8:30 - 11:45 AM 3 Contact Hours Intermediate

Friday, October 23, 2009

Session # 25 2:00 - 5:15 PM 3 Contact Hours Basic

Germs, Cultures and Stains: Basic Microbiology for the Generalist



Correct interpretation and set up of Microbiology testing provides invaluable information to the clinician for the diagnosis of their patient's condition. The session is aimed at the generalist that rotates through the Microbiology lab performing basic plate reading and culture set up. We will be reviewing various Microbiology procedures including Gram Staining and Interpretation, specimen collection and culture set up, processing positive blood and sterile fluid cultures from instruments and basic culture workup.

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

- Describe the process for gram staining slides of direct specimens and interpretations from various body sites.
- \checkmark Discuss basic culture set up and the media needed for specific specimen sources.
- ✓ Describe procedures for processing of positive blood and sterile body fluid cultures.
- ✓ Review basic culture workup and interpretations.

LEANNE GILLY, MT(ASCP), CLS(NCA)

Medical Technologist/Microbiologist Northwest Hospital Medical Center Seattle, WA

AMANDA SNELSON, MT(ASCP)

Clinical Technologist University of Washington Medical Center Seattle, WA

Session # 26 2:00 - 5:15 PM 3 Contact Hours Basic

Automation and Informatics 101



This session will offer basic and intermediate education on laboratory automation and informatics. The basics of pre and post analytical automation will be discussed. The pro's and con's of different types of automation as well as that of an "open" system. Helpful hints and suggestions for those laboratorians exploring automation will be offered.

The goal of the informatics part of the presentation will be to explore 3 ways that middleware can streamline laboratory processes. Results review through auto-verification, rule writing and QC. Middleware can assist with automating result review by releasing those results that do not require technologist attention. A robust rules engine automates such tasks as: reflex testing, result comments and reruns. Informatics streamlines QC by communicating QC results directly from an analyzer through the informatics into the QC software.

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

- ✓ Discuss the basics of pre analytical, analytical and post analytical automation
- \checkmark Understand what automation does and does not do
- ✓ Define the term "open automation"
- ✓ Define how autoverification helps with streamlining result review
- ✓ Discuss the power of a robust rule set and how it can standardize the lab process
- Discuss the integration of QC, automating the entry of QC results and sending reports for peer review

JODY GROSS, MBA, MT(ASCP)

Regional Automation Sales Manager Abbott Diagnostics Abbott Park, IL Sponsored by Abbott Diagnostics

PHIL ILLINGWORTH, MS, BS

Lab Automation Consultant-Informatics Abbott Diagnostics Abbott Park, IL

Friday, October 23 2009

Session # 27 2:00 - 5:15 PM 3 Contact Hours Intermediate

The Nuts and Bolts of Coagulation Testing

Coagulation testing differs from chemistry testing. For example, how do you determine the sensitivity of your protime and PTT reagents when these tests don't require a calibration curve? Knowing the sensitivity of your reagent system can help in the investigation of a prolonged protime or PTT. How do you perform and interpret 1:1 mixes? What are the exceptions to the rules? When getting in a new instrument and reagent system or even a new lot number, how do you go about the validation studies? If your lab is considering adding some special coagulation testing, what are the issues associated with the various specialty assays? This session will give you the answer to all of these questions and many more. Be sure to bring your coagulation questions for the question and answer section at the end of this session.

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

- ✓ Validate a new lot of protime reagent.
- ✓ Interpret a protime or PTT 1:1 mix.
- ✓ List two things that interfere with a protein S activity assay.

CHRIS FERRELL, MT(ASCP), CLS/H(NCA)

Special Coagulation Laboratory Lead Harborview Medical Center Seattle, WA

Session # 28 2:00 - 5:15 PM 3 Contact Hours Intermediate

Advanced Topics in Cystic Fibrosis Microbiology

Cystic fibrosis microbiology is an evolving specialty in laboratory diagnostics. The purpose of this session is to provide an overview of the clinical aspects of CF microbiological diagnostics. Particular emphasis will be placed on the procedures for isolation, quantitation, identification, and antibiotic susceptibility patterns of *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Stenotrophomonas maltophilia*, *Achromobacter xylosoxidans*, and emerging gramnegative rods.

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

- \checkmark Describe the detection and identification methods used in CF.
- ✓ Describe the use of the most up to date strategies for identification of atypical morpho types of P. aeruginosa.
- ✓ Describe methods used for antibiotic susceptibility testing in CF and understand advanced topics in antibiotic resistance research.

ANNE MARIE M. BUCCAT, MS, MT(ASCP)

Supervisor, Therapeutics Development Network Center for CF Microbiology Seattle Children's Hospital Seattle, WA

JANE L. BURNS, MD

Professor, Pediatrics, Division of Infectious Diseases Director, Center for CF Microbiology Seattle Children's Hospital Seattle, WA

Saturday, October 24, 2009

Session # 29 8:30 - 11:45 AM 3 Contact Hours Intermediate

Session # 30

Intermediate

8:30 - 11:45 AM 3 Contact Hours

"A Tiny Pinch" – the Legalities Associated with Phlebotomy Procedures



"This won't hurt a bit..." or will it hurt for a very long time? In this session we will explore real legal cases involving phlebotomy-related injury and their outcomes. In addition, we will discuss ways to avoid becoming involved in a lawsuit – as a phlebotomist, a supervisor, or a consumer. Knowledge of current CLSI is helpful but not necessary.

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

- ✓ Discuss the current CLSI standards associated with phlebotomy.
- ✓ Define basic legal application/law as far as malpractice is concerned.
- Describe/discuss the potential harm that can be done to a patient by an inexperienced and/or uneducated phlebotomist.

LISA G. COUNTRYMAN-JONES, BS MT(ASCP), CLS, CPT(NCA)

Faculty/Clinical Laboratory Practice Coordinator Portland Community College Portland, OR

Perinatal Pathology: 2009 and Beyond

Dr. Siebert will provide an overall view of the practice of fetal, perinatal, and neonatal pathology, concentrating on embryologic processes responsible for congenital birth defects, mechanisms of pregnancy loss, and consequences of biochemical abnormalities and infectious processes. He will present numerous case studies to illustrate these points.

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

- $\checkmark\,$ Appreciate the contribution of the autopsy to the health and well-being of families and society
- ✓ Understand the types of congenital anomalies and perinatal disorders and the ways they occur
- ✓ See how postmortem anatomic and clinical techniques are used to diagnose congenital anomalies and other forms of perinatal disease

JOSEPH R. SIEBERT, PHD

Professor of Pathology and Pediatrics Seattle Children's Hospital and University of Washington Seattle, WA Session # 31 8:30 - 11:45 AM 3 Contact Hours Intermediate

Advances and Challenges in the Laboratory Diagnosis of Tuberculosis

Tuberculosis continues to spread worldwide as a complex and recalcitrant disease. Clinicians, scientists, and laboratorians are working to innovate TB diagnosis and treatment in light of increasing drug resistance and decreasing public health and laboratory resources. Topics will include:

- Interferon-gamma release assays (IGRAs): Blood tests for TB detection, based on specific T-cell memory, with novel procedural and interpretive characteristics
- Direct nucleic acid amplification testing (NAAT) for drug resistance as well as TB detection: includes real time PCR, line probe assays, DNA microarrays
- Conventional laboratory techniques: Best practices to improve mycobacterial yield and turnaround times.

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

- ✓ State the epidemiology and clinical course of TB, including development of drug-resistance.
- ✓ State the advantages and limitations of molecular methods for the detection of TB and drug resistance.
- \checkmark List criteria for appropriate use of these assays.
- ✓ Describe practices that optimize results from conventional test techniques.
- ✓ State the advantages and limitations of IGRA tests, and place in the context of other diagnostic modalities for this organism.

DAVID KOELLE, MD

Professor, Department of Medicine University of Washington Seattle, WA

CAROLYN K. WALLIS, MT(ASCP)

Lead Technologist, Microbiology Harborview Medical Center Seattle, WA

Session # 32 8:30 - 11:45 AM 3 Contact Hours Advanced

Clinical Manifestations, Laboratory Diagnosis, and Practical Approaches to Blood Transfusion in Patients with Hemoglobinopathies

In the first part of this talk, Dr. Hoffer will discuss the genetics, molecular biology, and physiology of normal hemoglobins that are expressed throughout the lifespan and will also discuss general biophysical principles that underlie all hemoglobinopathies. In the second part, he will discuss specific hemoglobinopathies, including the clinical manifestations and laboratory findings for each. In the final part of the talk, he will discuss special topics in transfusion medicine with regard to hemoglobinopathies, including both the donation of blood from affected individuals, and the use of normal blood products in the treatment of disease.

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

- ✓ Correlate the genetic and molecular mechanisms underlying hemoglobinopathies.
- ✓ Describe the clinical manifestations, advances in laboratory diagnostic methods, and current treatment guidelines for hemoglobinopathies.
- ✓ Discuss unique issues in transfusion medicine with regard to hemoglobinopathies.

ZACHARY S. HOFFER, MD, PHD

Pathology Resident Madigan Army Medical Center Tacoma, WA

Saturday, October 24, 2009

Session # 33 1:00 - 4:15 PM 3 Contact Hours Basic

Immunohematology Basics

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Join us for a review of basic Immunohematology theory through case studies as we discuss compatibility testing and problem resolution. The first half of the session will cover pretransfusion and diagnostic testing with an emphasis on emergency orders and blood substitution. The second half will focus on ABO/Rh discrepancies and antibody identification. Bring your questions and concerns to add to group discussions of problem solving approaches.

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

- \checkmark Discuss lab testing for blood component transfusion and diagnostic applications.
- ✓ Evaluate approaches to antibody identification.
- $\checkmark~$ Describe the recognition and resolution of ABO/Rh discrepancies.

ROXANN GARY, MT(ASCP) SBB

Internal Training Coordinator Puget Sound Blood Center Seattle, WA PATRICIA HODGES, MT(ASCP) SBB

External Training Coordinator Puget Sound Blood Center Seattle, WA

Case Presentations in Parasitology

Session # 34 1:00 - 4:15 PM 3 Contact Hours in Intermediate At

In this session, Dr. Schmer will share case presentations of the most common parasites in the USA and in travelers (e.g., Malaria).

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

- ✓ Give an overall view of the clinical picture.
- \checkmark Describe the necessary laboratory workup to make a diagnosis.
- ✓ Discuss some of the difficulties in making a laboratory diagnosis of parasites.

GOTTFRIED SCHMER, MD, MPH

Emeritus Professor, Lab Medicine University of Washington Seattle, WA

Being Fixated on Permanent Stool Stains: How to be Sane in the Insane World of Stool Fixation and Preservation

Remember the good ole days of mercuric chloride based PVA stool fixatives? The "gold standard" for the fixation of ova and parasites in the preparation of permanently stained smears of stool specimens has been PVA (polyvinyl alcohol) containing the fixative mercuric chloride. Current regulatory bodies highly discourage the use of mercury based fixatives, so we are left with other alternative preservative/fixative choices. The session will explore the many problems encountered in the laboratory when using the alternative preservative/fixative products. We will then cover solutions to these many problems.

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

- ✓ Identify the alternative stool preservative products currently on the market
- ✓ Identify some of the problems encountered when examining permanent stool stains using the currently available stool preservatives.
- ✓ Identify and hopefully utilize some of the suggested solutions to the problems encountered using alternative stool preservation techniques.

GERALD HARMON, MT(ASCP)

Microbiology Supervisor Quest Diagnostics, Inc Seattle, WA

Saturday, October 24, 2009

Session # 35 1:00 - 4:15 PM 3 Contact Hours Intermediate

Flow Cytometry of B-cell Neoplasms

The session will discuss the basics of using flow cytometry to diagnose B-cell neoplasms using a case based format.

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

- Describe the typical flow cytometric features of benign B cells
- ✓ Describe the typical flow cytometric presentation of common B cell neoplasms
- Outline situations where false negatives may occur when using flow cytometry to diagnose B-cell neoplasms.

JASON LOVE, MD

Associate Pathologist Western Washington Pathology Tacoma, WA

Session # 36 1:00 - 4:15 PM 3 Contact Hours Intermediate

Cases in Endocrinology

In this session, Dr. Sealfon will review common endocrine feedback systems with special emphasis on pituitary, thyroid, parathyroid, adrenal, and gonadal function. Unique case studies will be utilized to illustrate specific laboratory challenges.

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

- ✓ Describe common endocrine pathway feedback mechanisms.
- ✓ Describe both common and rare endocrine disorders.
- ✓ More effectively interpret endocrine results to ensure clinical accuracy.

MICHAEL S. SEALFON, PHD, MT(ASCP)

MLT Program Director Renton Technical College Renton, WA

Special Notes

Hotel Information

Special group rates are available at the Double-Tree Hotel, Seattle Airport, through Sept 20, 2009. After that date room rates will be at the discretion of the hotel. Please mention that you are with the Northwest Medical Laboratory Symposium when making your reservations. Reservations may be made by telephone at 1-800-222-TREE (800-222-8733)

General Information

Casual dress is appropriate for all sessions. There will be no smoking in any of the sessions.

Your name badge is required for admission to all sessions, to the Exhibit Hall, and to social functions. Please wear your name badge at all times.

Message Center

A message board will be maintained at the registration desk for Emergency messages. The phone number for the DoubleTree, Seattle Airport, is 206-246-8600.

Hospitality

In keeping with tradition, all exhibitors will participate in combined hospitality functions in the Exhibit Hall. **There will be no individual hospitality suites.**

Session Pass and

Meeting Room Assignments The session room assignments will be printed on the session sheet in your registration packet. A floor plan will be available in your packet as well as at the registration desk.

Updates

Updates will be posted on the website at <u>www.asclswa.org</u> Please check for session updates and or cancellation information.

P.A.C.E.®/AMTIE

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 of note of the P.A.C.E.® number and of 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.

EXHIBITORS & EXHIBIT HALL INFORMATION

The leading manufacturers and distributors will once again gather in the Exhibit Hall at the Doubletree Hotel Seattle Airport to display their wares. This will be the 26th year that they have participated in the Northwest Medical Laboratory Symposium to provide access for Clinical Laboratorians to the newest products and to demonstrate the ability for aiding in the diagnosis and health care of the public.

In addition, Abbott Diagnostics, Beckman Coulter, bioMerieux, and Siemens Healthcare Diagnostics will be bringing their demonstration vans displaying their larger pieces of equipment.

The vendors and their representatives are an integral part of our meeting and provide sponsorship for the continuing education sessions and other activities during this meeting. It is with the help and support from the laboratory supply companies that a volunteer group of individuals from the professional societies are able to arrange this Symposium.

As laboratory professionals, you do not have to register for the Symposium in order to view the displays in the Exhibit Hall. When you come to the Exhibit Hall, sign in on the log sheets and pick up a nametag and join the Committee in thanking the vendors for their support. The following companies have registered for space.

3M Medical Diagnostics	Instrumentation	Laboratory
Abbott Diagnostics	Inverness Medie	cal
Anatek Healthware, LLC	IRIS Diagnostic	S
ARUP Laboratories	Mayo Medical L	aboratories
Audit MicroControls, Inc	Medical Logistic	s Solutions, Inc
BD Preanalytical Systems	Millipore Corpor	ation
Beckman Coulter, Inc	Modern Laborat	ory Services, Inc
Bio Rad Laboratories	NCM Direct Del	ivery
bioMerieux, Inc	Nikon Instrumer	nts, Inc
Cardinal Healthcare	Olympus Americ	ca, Inc
Cellestis, Inc	Quidel Corporat	ion
Cepheid	Ortho-Clinical D	iagnostics
Copan Diagnostics, Inc	RC-AID/BBK Te	chnology
Delivery Express	Rees Scientific	
Diagnostica Stago, Inc	Remel (Part of	Thermo Fisher Scientific)
DiaPharma Group, Inc	Roche Diagnost	tics
DiaSorin, Inc	Sebia Electroph	oresis
Fisher HealthCare	Siemens Health	care Diagnostics
Focus Diagnostics	Streck, Inc	
Genzyme Diagnostics	Sysmex Americ	a, Inc
Global Focus Marketing & Dist	The Binding Site	9
Hardy Diagnostics	Tosoh Biosciend	ce, Inc
Hemocue	University of Wa	ashington Lab Medicine
Immunodiagnostic Systems, Inc	Waters Corpora	tion
Wednesday, October 21	Exhibit Opening	11·30 AM - 2·00 PM
	Exhibit Opening	11.50 AM = 2.00 F M
Thursday, October 22		11:30 AM – 2:00 PM
		5:00 PM – 7:00 PM
Friday, October 23	Exhibit Closing	11:30 AM – 2:00 PM

EXHIBITOR PRODUCT LIST

3M Medical Diagnostics: Flu A & B Test, RSV Test Abbott Diagnostics: ci4100 Anatek Healthware, LLC: LabDAQ Web Ordering, LabDAQ Middleware, LabDAQ LIS AARP Laboratories: Education, ATOP (proper test usage), Cancer Testing Audit MicroControls, Inc BD Preanalytical Systems: Rapid Serum Tube, Push Button Wingsets, Contact Activated Lancets, Urine **Collection Products** Beckman Coulter, Inc: ACL TOP 500, DXH800 **Bio Rad Laboratories** bioMerieux, Inc **Cardinal Health** Cellestic, Inc: QuantiFERON-TB Gold In Tube Cepheid Copan Diagnostics, Inc: WASP: Walk-Away Specimen Processor, ESwab, Flocked Swabs, UTM **Delivery Express** Diagnostica Stago, Inc: Coagulation Instruments and Reagents DiaPharma Group, Inc: Multiplate Platelet Function Analysis, Diapharma Factor X, Coamatic Heparin, Technozym ADAMTS-13 **DiaSorin**, Inc Fisher HealthCare: Diadexus PLAC, Luminex RVP, Microgenics Quality Control and Linearity **Focus Diagnostics** Genzyme Diagnostics: OSOM Flu A&B Test, OSOM Ultra Strep A **Global Focus Marketing & Distribution, Ltd** Hardy Diagnostics: Hardychrom Hurbi, C-Diff Broth, Strep B Carrot Broth, Microgen Gram Neg ID HemoCue, Inc Immunodiagnostic Systems, Inc: Vitamin D, Serum CrossLabs (CTX-I), N-Mid Osteocalcin Instrumentation Laboratory: GEM Premier 3500, GEM Premier 4000, GEM OPL, GEM PCL Plus IRIS Diagnostics: i-RICELL Workstation **Mayo Medical Laboratories Medical Logistics Solutions, Inc** Millipore Corp Modern Laboratory Services, Inc: Siemens Dimension, Siemens Immulite, Sysmex Hematology, **TOSOH Immunoassay & HbA1C NCM Direct Delivery** Nikon Instruments, Inc Ortho-Clinical Diagnostics: VITROS 5600, VITROS 3600, VITROS ECiQ, PROVUE **Olympus America**, Inc Quidel Corporation: QuickVue Influenzae, QuickVue RSV, Quickvue Strept RC-AID/BBK Technology: RC-AID **Rees Scientific Remel (Part of Thermo Fisher Scientific)** Roche Diagnostics: Cobas 5000, Cobas c311 Sebia Electrophoresis: Minicap Siemens Healthcare Diagnostics: Vista 500, Immulite XPi, EXL with LOCI Module, Innovance D-dimer Assay, Sirolimus Assay, New MicroScan Panels including the D-test on Gram Pos Streck, Inc Sysmex America, Inc The Binding Site: Freelite Screening, Serum Protein Analyzer, Elisa Kits Tosoh Bioscience, Inc: G8HPLC, 360 **University of Washington - Lab Medicine** Waters Corporation: Xevo TQ MS, Acquity TQD, ACQUITY UltraPerformance LC

For Exhibit Information: Contact William Eng @Vhapugengw@yahoo.com

Registration Terms and Conditions

Fees are listed for each category. To ensure adequate processing time, please postmark your registration by October 5, 2009. An additional \$10.00 fee will be charged for on-site registration. 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 not provided for registrants that sign up only for an AM or 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 the completed membership application is eligible for member rates. Please include a copy of the membership form with your registration.

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 **NWMLS**. The bank will not accept checks made payable to any other name. The registration will not be processed until full payment made out to **NWMLS** 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 hotel 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 or an emailed confirmation may we requested. Please write your email address clearly.

2009 Northwest Medical Lab Symposium October 21 - 24, 2009 DoubleTree Hotel, SeaTac Airport

PLEASE PRINT AND SHOW NAME AS WANTED ON NAME TAG

First Name	Last Name
Address	
City/State/Zip	
Day Phone	Evening Phone
Institution	
City/State	
E-Mail Address	

Please circle sessions you wish to attend.

Would you be willing to serve as Moderator for any of the sessions you will be attending? Please circle response. Yes No

Wednesday October 21	AM	1	2	3	4
	PM	5	6	7	8
Thursday	AM	9	10	11	12
October 22	PM	13	14	15	16
	Eve	17	18	19	20
Friday	AM	21	22	23	24
October 23	PM	25	26	27	28
Saturday October 24	AM	29	30	31	32
	PM	33	34	35	36

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

Member ASCLS or AMT	(Membership #: ASCLS	AMT)
	Full Day	days	@ \$100.00	\$
	Half Day	half days	@ \$50.00	\$
Student				
	Full Day	days	@ \$50.00	\$
	Half Day	half days	@ \$30.00	\$
Non-Member				
Technical/Adminis	trative Professional			
	Full Day	days	@ \$180.00	\$
	Half Day	half days	@\$90.00	\$
Phlebotomist/Lab	Assistant			
	Full Day	days	@ \$80.00	\$
	Half Day	half days	@ \$40.00	\$
Evening Session Fees				
Technical Profess	ional, ASCLS or AMT member	session	@ \$40.00	\$
Technical/Profess	ional, Non-Member	session	@ \$50.00	\$
Student or Phlebo	tomist	session	@ \$20.00	\$

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 **NWMLS.**

\$____

email: j1953j@clearwire.net

Please Postmark by October 5, 2009

Total

APPLICATION FOR MEMBERSHIP American Society for Clinical Laboratory Science

Name	Date of App tion	plica-
Company	Departmen	nt
Address	City/State Z	Zip
E-mail Address	Telephone	Fax
Home Address	City/State/Z	Zip
Home Phone		
Check here if you want to recei	ve your ASCLS mail at home	

Scientific Assembly

The ASCLS Scientific Assembly sectons provide an opportunity for members to network within their own scientific discipline. There is no additional fee for participation. Please choose one primary and one secondary interest.

Primary	Secondary Ir	nterest
(01)	(01)	chemistry/urinalysis
(02)	(02)	microbiology
(03)	(03)	laboratory administration
(04)	(04)	immunology/immunohema- tology
(06)	(06)	histology/cytology
(07)	(07)	hematology/hemostasis
(08)	(08)	generalist/public health
(09)	(09)	industry
(10)	(10)	education
(11)	(11)	phlebotomy/POC
(12)	(12)	molecular

CERTIFICATION AGENCY - Circle the corresponding credentialobtained; check all that apply.(4)NCA(a) CLS(b) CLT(c) other

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(5)	AMT	(a)MT	(b) MLT	(c) other
(6)	ASCP	(a) MT	(b) MLT	(c) other
(7)	HHS		(b) CLT	(c) other
(9)	Other			

POSITION - Circle one
(P) Lab Director (Admin)
(N) Lab Mananger
(A) Tech. Supervisor
(M) Staff Technologist (CLS)
(4) Staff Technicial (CLT)
(t) Phelbotomist
(6) Laboratory Assistant
(I) Faculty Member/Instructor
(K) Program Director
(L) Consultant
(U) Inspector/Sales

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

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: ___ = Total payment enclosed _____

Method of Payment: (U.S. Fund	ds Only)		
Check (payable to ASCLS)	Visa _	_ MasterCard	Amex

Exp. date	
Card #	
Name on card	
Name on card	

Please complete and send this application with your payment to our lockbox: ASCLS, P.O. Box 79154, Baltimore, MD 21279-0154 Phone: 301-657-2768 Fax: 301-657-2909 Sessions at a Glance

Core Track in Blue Cells

	·					
	AM	1	2	3	4	
iday, r 21		Cytology of Body Fluids	Communicate, Collaborate, and Include	Antimicrobial Drug Resistance	LC-MS Using Vita- min D	
Ines obe		Exhibits: 11:30 AM -	- 2:00 PM			
Wed	PM	5	6	7	8	
		Diagnosis in Blood Smear	Genetic Testing Blood Groups	Training the Trainer	Hepatitis B and C	
	AM	9	10	11	12	
		Preanalytical Variables // Trouble- shoot Hemolysis	Pediatric Acute Leukemia	Appl Toyota Pro- duction System in Microbiology	Calcium Physiology	
		Exhibits: 11:30 AM -	- 2:00 PM			
	PM	13	14	15	16	
Thursday, October 22		Urinalysis, A Review	Cardiac Disease	Right Test, Right Time, Right Reflex // Critical Values	Molecular Testing in Breast Cancer // Detecting Tumor Cells	
		Exhibits: 5:00 - 7:00 PM				
	Eve	17	18	19	20	
		Assisted Reproductive Endocrinology	Lab Medicine on the Front Lines	Integrated Oncology Care	Patient Safety and Anticoagulants	
	AM	21	22	23	24	
53		Hemostasis Review	WA State Public Health Lab Terror- ism Response	Diagnosis of Genetic Disease	Lupus – Multiple Organs, Multiple Tests	
iday ober		Exhibits: 11:30 AM – 2:00 PM				
Ct II	РМ	25	26	27	28	
0		Basic Microbiology for the Generalist	Automation and Informatics 101	Nuts and Bolts of Coagulation Testing	Topics in Cystic Fibrosis Microbiology	
	AM	29	30	31	32	
lay, r 24		Legalities Associat- ed with Phlebotomy	Perinatal Pathology	Lab Diagnosis of Tuberculosis	Blood Transfusions in Patients with He- moglobinopathies	
obi	РМ	33	34	35	36	
Sa Oct		Immunohematology Basics	Case Presentations Parasitology// Permanent Stool Stains	Flow Cytometry of B-Cell Neoplasms	Cases in Endocri- nology	