2007
Northwest Medical Laboratory Symposium

American Society for Clinical Laboratory Science, Region IX
ASCLS-Washington
Oregon Association for Clinical Laboratory Science

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

DoubleTree Hotel
Seattle-Tacoma Airport
Seattle, WA
October 24 - 27, 2007

2007 NWMLS FEATURED SPEAKER:

Rick Panning, MBA, CLS(NCA), ASCLS President

Rick Panning has 30 years of experience in the clinical laboratory, the last 25 in management. He has served as an administrator for hospital and clinic laboratories, most recently as the President of Laboratory Services for Fairview Health Services in Minneapolis, MN for 12 years, ending in 2006. There he was responsible for laboratory services provided by 900 laboratory professionals in 7 hospitals and over 30 clinics. He is now the CEO for the American Red Cross North Central Blood Services in St. Paul, Minnesota where he provides leadership for over 600 employees, providing blood donor operations and hospital blood product distribution and clinical services for over 110 hospitals in Minnesota, Wisconsin and South Dakota.

Rick has been a member of ASCLS since 1975 and a member of CLMA since 1984. He has served on the board of directors of CLMA-MN and served as its state president. In ASCLS Rick has served in a variety of roles in the state, regional and national organization including Region V director for 3 years. Rick is currently the national president of ASCLS. In addition, Rick is currently the chair of the Minnesota laboratory licensure coalition.

Please join ASCLS President Rick Panning for these 2007 Northwest Medical Laboratory Symposium events:

No charge events

Wednesday, October 24th 11: 45 am, “Welcome and Official Opening of the Exhibit Hall”
Thursday, October 25th 12:00, “Meet and Greet ASCLS President” in the Exhibit Hall.

Sessions

Wednesday, October 24th 2:00 - 5:15 PM, “Leadership and Current Professional Issues”

Thursday, October 25th 08:30-11:45 PM, “Management Hot Topics”

WELCOME!

AN INVITATION TO LEARN

Learning is an ongoing endeavor throughout one's life. We would like to invite you to continue your professional learning by attending the 2007 Northwest Medical Laboratory Symposium. The Symposium is traditionally the best learning opportunity for medical laboratorians in the Pacific Northwest. In addition to offering an array of learning opportunities, the Symposium is an excellent opportunity to update your knowledge of the cutting edge information in the field, view the latest in laboratory equipment and instrumentation, and network with other laboratory professionals.

The field of laboratory medicine is expanding immensely. What we learned in our formal training has been eclipsed by new discoveries. The Symposium strives to present sessions necessary to maintain continued competency as well as continued certification. All three of the major laboratory certifying agencies now require that registered members obtain continuing education to update or retain certification. These annual continuing education requirements can be fulfilled by the learning opportunities available at the Northwest Symposium.

The exhibit show at the Northwest Medical Laboratory Symposium provides laboratorians an opportunity to view the vast variety and quantity of instrumentation and equipment available for use in our daily work. From needles to analyzers, all of the latest products and equipment will be available. Many local industry representatives will be present, available for discussion outside the hectic pace in the laboratory.

Don't miss this excellent opportunity to expand your knowledge, to assure your continued competency, and to increase your workplace value. Come join us at the Northwest Medical Laboratory Symposium in at the DoubleTree, Seattle Airport, Washington.

DONNA REINBOLD, CLS (NCA)
Director, ASCLS Region IX

EDNA ANDERSON, MT (AMT)
AMT Western District Councillor

The 2007 NWMLS Program and a registration form are available on the Internet at the following URLs:

http://www.asclswa.org
http://www.asclsr9.org

Updates and other information will be provided through the www.asclswa.org site. Please check this site periodically for updates on any session changes. This is especially important if you have not pre-registered because we have no other way to notify you.

Special Notes

Hotel Information

Special group rates are available at the DoubleTree Hotel, Seattle-Tacoma Airport, through October 1, 2007. 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)

Name Badges

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.

General Information

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

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.

Hospitality

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

Updates

Updates will be posted on the website at www.asclsr9.org and www.asclswa.org
Please check for session updates and or cancellation information.

P.A.C.E.® / AMTIE

Credits have been approved for all appropriate sessions. ASCLS-WA (formerly WSSCLS) is an approved provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® program. Additionally, ASCLS-WA (formerly WSSCLS) is approved as a provider for California clinical laboratory licensees under P.A.C.E.® California accrediting agency license number 0001. NWSSAMT is the approved provider for AMTIE CECs and insures these educational presentations conform to standards established by AMTIE.

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DOUBLETREE®
HOTEL

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

DIRECTIONS:

From Seattle/Tacoma International Airport:

- Follow signs 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, exit #152 (188th/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 3rd floor of the airport parking garage and runs every 15 minutes on the hour, 24 hours per day.

DoubleTree Hotel

Seattle-Tacoma Airport

18740 Pacific Highway South, Seattle, WA

NORTHWEST MEDICAL LABORATORY SYMPOSIUM
OCTOBER 24 - 27, 2007

To reserve your room at the convention rate, please call the DoubleTree Hotel for a reservation no later than October 1, 2007. Reservations received after October 1st are subject to availability at the standard rates, rather than the discount rate. If the group block is sold out upon receipt of your reservation, the reservations office will contact you and assist you in securing a reservation at the nearest available hotel.

In order to guarantee your reservation beyond 6 PM on the date of arrival, your reservation must be accompanied by first night's advanced deposit or a major credit card number. Please call the hotel at 800-222-TREE or 206-246-8600 and state that you are with the Northwest Medical Laboratory Symposium to obtain the room rate given.

Room Rates:

_____ Up to 4 per room $ 139.00

Guest Room rates are subject to a 12.4% occupancy rate.

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.

Parking Rates: Parking at the hotel is $8.00 per day or $10.00 for overnight.

Because of limited parking the NWMLS committee recommends that registrants carpool whenever possible

2007 NWMLS Committee

General Chairs
Don Kuhn
Joyce Behrens

Program
Candace Anderson, Chair

Carol S. Anderson
Rachel Bird
Linda Breiwick
Lynn Emmert
Barbara Gregory
Sue Goss
Kyoko Kurosawa
Greg Metzger
Karen Nordal
Colleen Sexton
Marianne Strnad

Registration
Denise Pichotta
Lynne Nordrum

Exhibits
Karen Bennett

P.A.C.E.®
Brenda Kochis

Moderators
Roxanne Erskine
Molly Morse

Audio Visual
Lisa McDonnel

Hospitality
Sue Goss
Linda Wilkins

Program Design
Brenda Kochis

Finance
Toni Okada

Webmaster
Brenda Kochis

Western District of American Medical Technolgists Officers and Business Meetings

Western District Councillor — Edna Anderson

The AMT Western District includes Idaho, Montana, Oregon and Washington.

OSSAMT

President	Willie Richardson
President Elect	Marilyn Albertsen
Secretary	Audrienne Whitley
Treasurer	Clifford Colvin

OSSAMT Board Meeting
Friday, October 26, 2007 6:30 - 8:00 AM
OSSAMT Business Meeting
Friday, October 26, 2007 6:00 PM

NWSSAMT

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

NWSSAMT Board Meeting and Business Meeting
Friday, October 26, 2007 5:30 PM

ASCLS Officers and Business Meetings

Regional Director — Donna Reinbold

The Council is composed of the Presidents, President-Elects, and Past Presidents of OASCLS, CLSA and ASCLS-WA (formerly WSSCLS). All ASCLS members and any interested nonmembers are welcome to attend.

Region IX Forum
Friday, October 26, 2007
6:00 - 7:30 PM

OACLS

President	Brenda Lawing
President Elect	Sarah Erhardt
Secretary	Helen Wand
Treasurer	Krista Moore
Past President	Cheryl Thomas

OACLS Board Meeting
Friday, October 26, 2007
Follows Region IX Forum

ASCLS-WA (formerly WSSCLS)

President	Mary Helen Carroll
Secretary	Sue Seegers
Treasurer	Sammie Preble
Past President	Molly Morse

WSSCLS Board Meeting
Friday, October 26, 2007
Follows Region IX Forum

CLSA

Past President	Marcia Souser
President	Shellie Smith
President Elect	Jill Jefson
Treasurer	Irene Hemphil
Secretary	Sue Myers

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

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

Exhibit Hours

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

Beverages and Hors d'oeuvres

Friday	11:30 AM - 2:00 PM

Lunch

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

Note: Lunch is provided only with full-day pre-registrations. Either an all-day session or two half-day sessions on the same day constitute a full-day registration. **Lunch is not provided with half-day 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.

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

Wednesday, October 24, 2007

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

Molecular Biology in the Clinical Immunohematology Laboratory: A Review and Update

This presentation will begin with an overview of Molecular Biology theory and concepts. We will then move on to applications of Molecular Biology in a modern Immunohematology laboratory, including platelet and HLA genotyping, and antibody analysis. The session will conclude with a discussion of phamacogenomics, which will eventually allow physicians and medical professionals to tailor individual therapies for disease treatment.

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

- Describe, in general, the processes of transcription and translation of genetic code into functional proteins.
- Describe the Polymerase Chain Reaction (PCR).
- Describe how molecular biology techniques might be used in a clinical laboratory.

PAUL R. WARNER, MT(ASCP), D(ABHI), PHD
Co-Director, Immunogenetics Laboratory
Puget Sound Blood Center
Seattle, WA

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

New Approaches in Tumor Immunotherapy

Immunotherapy of breast and ovarian cancer is a rapidly expanding area of research. The identification of well defined immunogenic cancer antigens has led to the investigation and application of immunotherapeutic strategies in the treatment and prevention of breast and ovarian cancer. This presentation will focus on reviewing basic aspects of tumor immunology, current clinical applications of immunotherapy strategies and new directions in targeted immunotherapy.

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

- Describe the basic principles of immunology and identify mechanisms of ineffective tumor immunity.
- Review the development and clinical application of cancer vaccines.
- Describe basic principles of tumor antigen and biomarker discovery.
- Describe basic principles of adoptive T cell therapy.

LUPE G. SALAZAR, MD
Assistant Professor of Medicine, Division of Oncology
University of Washington
Seattle, WA

HAILING LU, PHD
Assistant Research Professor of Medicine, Division of Oncology
University of Washington
Seattle, WA

VY LAI, PHD
Senior Fellow, Division of Oncology
University of Washington

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

NKDEP/Creatinine Restandardization/eGFR and Calibrator Traceability/Assay Standardization/Global Harmonization

Review of the application of the principles of Metrology to the clinical laboratory for the purposes of standardizing lab performance over time and space, with the restandardization of creatinine assays as an example. Explanation of how random creatinine values can be used to estimate GFR for the early detection of chronic kidney disease, a major adverse outcome of Diabetes mellitus.

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

- Describe key concepts of Metrology that are currently being applied to the clinical laboratory.
- Explain how Metrology can promote the global harmonization of laboratory practice.
- Illustrate the concepts of calibrator traceability and assay standardization using creatinine as an example and how creatinine can be used to estimate GFR.

DAVE ARMBRUSTER, PHD, DABCC, FACB
Global Scientific Affairs Manager
Abbott Diagnostics
Abbott Park, IL

Session sponsored by: Abbott Diagnostics

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

Regulatory Update: CLIA, CAP, JC

Today's testing sites are required to comply with a myriad of regulatory requirements with CLIA, CAP, Joint Commission, or other accrediting organization. This presentation addresses the most up-to-date changes in key nonwaived testing requirements for 2007 and the most recent changes for waived testing. In addition, this presentation provides ways to prepare for and "get" the fear out of the inspection process. It identifies what inspectors want to see and common deficiencies and pitfalls and includes sure-fire tips for inspection preparation and meeting the inspector with success.

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

- Describe the new CAP and JC quality requirements for waived testing.
- Discuss the recent changes made by the regulatory agencies for nonwaived testing.
- Identify testing/quality approaches to successfully meet the inspectors and regulations with success.

SHARON S. EHRMEYER, PHD, MT(ASCP)
Professor, Pathology and Laboratory Medicine
Director, Clinical Laboratory Science Program
University of Wisconsin School of Medicine and Public Health
Madison, WI

Session sponsored by: Instrumentation Laboratory, HemoSense, and Biosite

Visit the Exhibits
11:30 AM - 2:00 PM

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

Microchimerism: Can't We All Just Get Along

Individual session talks:

√ The Immunologic Legacy of Pregnancy: Fetal and Maternal Microchimerism in Human Health and Disease

√ Transgenerational Microchimerism: Identifying and Quantitating DNA from the Mother and Fetus of Women during Pregnancy and with Autoimmune Disease

√ Fetal Microchimerism and alloimmune surveillance for cancer

√ Soluble Donor DNA as a quantitative marker for allograft injury

Although the placenta was once believed to be a perfect barrier between the maternal and fetal circulation, recent studies indicate that cells traffic between the fetus and mother occurs routinely during pregnancy. Low levels of fetal and maternal cells persist in their respective hosts for decades after childbirth and perhaps remain indefinitely. Microchimerism (Mc) refers to a small population of cells or DNA harbored by one individual that derive from a genetically distinct individual. Mc can also arise after a blood transfusion, hematopoietic cell or organ transplantation, or from cell transfer between twins in utero. Both fetal and maternal Mc has been implicated in some autoimmune diseases, particularly ones resembling graft-versus-host disease (GVHD), a complication of hematopoietic cell transplantation. Recent advances in this field are summarized with focus on implications of naturally-acquired fetal and maternal Mc for human health, transplantation, and autoimmune disease. Finally, we present a recently hypothesized role for fetal Mc in establishing maternal peripheral tolerance to the fetus during pregnancy that has implications for tolerance following organ transplantation.

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

- Explain maternal-fetal cell trafficking and the potential short-term and long-term consequences of fetal and maternal microchimerism.
- Describe current knowledge as to the prevalence of microchimerism in the circulation and tissues of patients with autoimmune diseases and in healthy individuals.
- Describe the role of fetal cells in cancer.
- Explain the role of non-allelic quantitative PCR for detection of graft injury in transplantation.

KRISTINA ADAMS, MD
Assistant Professor, Obstetrics and Gynecology
University of Washington
Seattle, WA

V.K. GADI, MD, PHD
Research Associate
Fred Hutchison Cancer Research Center
Seattle, WA

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

Leadership and Current Professional Issues

Part I: Work teams and organizations often struggle to achieve their vision because they lack effective leadership. This session will illustrate the essential elements of leadership and the key attributes of an effective leader. Basic concepts covered will be the "ability to be present" and what it means to be a champion for those you lead.

Part II: In this presentation an overview of current issues impacting the profession will be covered. These issues will include:

- √ Personnel Licensure
- √ Clinical Doctorate in Clinical Laboratory Science
- √ Levels of Practice initiative
- √ Progress in the collaborative effort to merge NCA and ASCP (BOR)

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

- Describe how leadership and advocacy are alike.
- List three ways that a leader can be "present" with their team.
- List 3 national issues impacting the profession of Clinical Laboratory Science.

RICK PANNING, MBA, CLS(NCA)
President, ASCLS (2007-2008)
CEO, American Red Cross, North Central Blood Services
American Red Cross
St. Paul, MN

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

Diagnosis of Anemia in the Clinical Chemistry Laboratory

Red blood cell disorders and anemia are prevalent among the elderly and those with nutritional deficiencies. This session will explore the pathophysiology of anemia including chronic diseases and nutritional insufficiencies. Diagnosis of anemia will be discussed in relationship to testing performed in the clinical chemistry laboratory and contrasted with testing performed in patients presenting with iron overload.

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

- Discriminate between microcytic, macrocytic, and hemolytic anemia.
- Recognize the relationship between vitamin B12, serum and RBC folate, and ferritin.
- Explain the use of laboratory tests in the differential diagnosis of iron deficiency versus iron overload.

AMY K. SAENGER, PHD
Director, Central Clinical Laboratory/Central Processing
Mayo Clinic
Rochester, MN

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

What Can You Diagnose From a Peripheral Blood Smear and Coagulation Studies? A Case-based Discussion of Laboratory Medicine Hematology

This will be a case-based discussion. We will review a basic approach to evaluate a peripheral blood smear, including recognizing normal blood cells. The discussion will then move to diagnoses made or supported by findings on peripheral blood smears.

The second half of the talk will review laboratory coagulation testing (PT, PTT, thrombin time) and several clinical presentations of disorders of the coagulation system.

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

- Identify normal and abnormal peripheral blood cell morphology.
- Recognize the clinical history and peripheral blood smear or coagulation studies in several classic hematology cases.
- Interpret coagulation studies (PT, PTT and TT).

Sioban B. Keel, MD
Instructor of Hematology/Medicine
University of Washington
Seattle, WA

Michael Linenberger, MD
Associate Professor, Division of Hematology, Univ of WA
Medical Director, Apheresis and Cellular Therapy
Seattle Cancer Care Alliance
Seattle, WA

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

Autoimmune Rheumatic Disease Testing: Theory, Practice and Cases

In this session we will discuss theory and practice in tests for autoimmune rheumatic diseases. To develop the theory we will present case studies regarding use of autoimmune tests.

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

- Describe the reasons for false-positive autoantibody tests.
- Outline the clinical utility of autoimmune and inflammatory marker testing in rheumatic diseases.
- Describe the use of antibodies to cyclic citrullinated peptide for rheumatoid arthritis.

MARK WENER, MD
Director, Immunology Division, UWMC Clinical Labs
University of Washington
Seattle, WA

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

Management Hot Topics

This session will provide updates on the following management topics for the clinical/pathology laboratories. Other topics may be added as the session date approaches.

- √ Medicare competitive bidding demonstration project
- √ Medically Unlikely Edits (MUEs)
- √ Proposed changes in the ABN form
- √ Workforce shortage / personnel recruitment/retention
- √ Process improvement in the laboratory – utilization of 6 Sigma and LEAN to improve performance and quality

For each topic, the current status will be discussed along with how it impacts the laboratory and efforts to address the issue.

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

- Describe at least two ways in which Competitive Bidding can adversely impact the clinical laboratory.
- List three initiatives underway to address the personnel shortage.
- Describe how LEAN manufacturing can improve laboratory performance.

RICK PANNING, MBA, CLS(NCA)
President, ASCLS (2007-2008)
CEO, American Red Cross, North Central Blood Services
American Red Cross
St. Paul, MN

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

Diagnosing and Treating Osteoporosis: Integrating Issues From the Clinical and Treatment Perspectives

Osteoporotic fractures in women are three times as common as heart disease in the United States, however, osteoporosis is under-diagnosed and treated. Under-treatment remains a problem even following hip and spine fractures due to osteoporosis. The risk factors for this disease in the World Health Organization model are age, bone mineral density, BMI, prior fracture, corticosteroid use, family history, smoking/alcohol use.

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

- Discuss the nature of bone mineral density (BMD) and clinical risk assessment for predicting fracture risk.
- Discuss the use of non-pharmacologic treatment methods for osteoporosis.
- Discuss the efficacy of pharmacologic agents used in the management of osteoporosis.

ANNE M. BANKSON, MD, DABFP, CCD
Consultant
Bellevue, WA

Biochemical Markers Related to Bone Health

Bone is a dynamic tissue being turned over throughout life. Measures such as bone mineral density (BMD) provide measure of bone strength at one point in time. Biochemical markers may provide a dynamic indication of the stressors on bone health that lead to a prediction of how BMD will change. Markers of bone formation will be compared to markers of bone resorption. In addition, key biochemical markers such as 24 hour urine calcium, TSH, vitamin D, testosterone, and estrogen, will be discussed.

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

- Differentiate between common and esoteric biochemical markers of bone turnover.
- Understand which markers reflect bone formation and bone resorption.
- Describe what additional routine biochemical testing can be used to assess secondary causes of bone loss.

DANIEL D. BANKSON, SM, PHD, MBA, DABCC
Chief, Clinical Chemistry and STAT Laboratories
Veterans Affairs Puget Sound Health Care System
Seattle, WA

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

Benign Prostatic Hyperplasia (BPH): "Who is Treated and How"
Parathyroid Hormone: "Clinical Utility, Laboratory Measurements, and the Impact on Patient Outcomes"

Benign prostatic hyperplasia (BPH) is a noncancerous enlargement of the prostate gland that may restrict the flow of urine from the bladder. BPH involves both the stromal and epithelial elements of the prostate arising in the periurethral and transition zones of the gland; the condition is considered a normal part of the aging process in men and is hormonally dependent on testosterone and dihydrotestosterone (DHT) production.

Hyperparathyroidism is a condition caused by excessive and uncontrolled secretion of PTH by the parathyroid glands. Increased levels of PTH affect bone, the GI tract, and the kidneys, which causes elevation of the serum calcium level, generalized bone disease, decreased serum phosphorus levels, and increased renal secretion of calcium and phosphorus. A variety of systemic conditions that involve various tissues result from changes in serum calcium and phosphorus levels. Skin, tendons, muscles, soft tissue, kidneys, eyes, nervous system, gut, and vascular systems can be involved.

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

- Discuss the anatomy and function of the Prostate gland.
- Discuss BPH definition and US statistical trends.
- Describe appropriate lab tests (screening, free, complex, total PSA and Imaging (in some cases) for initial evaluation.

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

- Discuss the anatomy, biosynthesis and function of the parathyroid gland.
- Discuss the control mechanism in PTH secretion.
- Describe the clinical laboratory contributions in successful minimally invasive Parathyroidectomy.

MONET N. SAYEGH, MD, MS, BS, MT(ASCP)SH, CLS
Medical Doctor
Siemens Medical Solutions Diagnostics
Los Angeles, CA

Session sponsored by: Siemens Medical Solutions Diagnostics

Visit the Exhibits
11:30 AM - 2:00 PM

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

Method Validation as Applied to Chemistry and Immunoassays

The session will cover the concepts underlying studies used in the clinical laboratory to validate test methods. Topics will include error assessment, types of analytical errors and method validation requirements by CLIA. We will discuss the necessary evaluation experiments and will include practical examples with data analysis using Excel. Potential sources of errors specific to immunoassays will be presented.

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

- Classify analytical laboratory errors, including random error, systematic error (bias), and total error.
- Describe the utility of Excel tools in method comparison and linearity studies.
- Explain the protocols for performing the following studies: reproducibility, analytical measurement range, comparison detection limits, interference and reference range.
- Describe immunoassay-specific potential errors such as “high-dose-hook effect”, heterophilic antibodies.

Kathleen Hutchinson, MS, MT(ASCP)
Clinical Immunology Laboratory Supervisor
Department of Laboratory Medicine
University of Washington
Seattle, WA

Zehava Chen-levy, PhD, DABCC
Lecturer, Department of Laboratory Medicine
University of Washington

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

Updates in the Diagnosis and Management of Diabetes

Diabetes is associated with significant morbidity and mortality and its prevalence is rapidly increasing. This session will provide background information on diabetes, glycated hemoglobin, and current standardization efforts surrounding glycated hemoglobin measurement. Treatment and management of diabetes based on glycated hemoglobin targets, as well as synergistic correlations between glycated hemoglobin and mean blood glucose will be presented. In addition, the importance of tight glycemic control and management through intensive insulin therapy will be discussed in relationship to delaying the onset and decreasing the incidence of both short and long term complications.

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

- Discuss current guidelines and recommendations for the diagnosis of various types of diabetes.
- Describe the relationship between mean blood glucose and glycated hemoglobin, and the controversies that surround reporting schemes of these analytes.
- Compare and contrast the various methodologies available for glycated hemoglobin measurement.
- Identify the advantages of tight glycemic control.

Amy K. Saenger, PhD
Director, Central Clinical Laboratory/Central Processing
Mayo Clinic
Rochester, MN

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

Overview of Allergy Medicine

Earlier detection of sensitized individuals and offending allergens will allow opportunities for earlier therapeutic intervention to mitigate the progression of allergy to asthma . Third generation allergy testing offers high sensitivity, specificity and precision when monitoring patients with very low sIgE Levels and will help resolve overlapping symptoms of URD, Allergic Enteropathy, and the performance of specific immunotherapy if necessary.

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

- Describe the allergy march impact on specific age group.
- Outline the clinical presentation, diagnosis and treatment of allergic enteropathy.
- Describe the clinical utility of third generation allergen-specific IgE on earlier diagnosis and therapeutic intervention of pediatric allergy, URD, and other allergy related medical conditions.

MONET N. SAYEGH, MD, MS, BS, MT(ASCP)SH, CLS
Medical Doctor
Siemens Medical Solutions Diagnostics
Los Angeles, CA

Session sponsored by: Siemens Medical Solutions Diagnostics

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

Emerging Pathogens, 2007 Update

This session will review the epidemiology of emerging pathogens with an emphasis on conditions found in the Pacific Northwest. Significant emerging pathogens will be described, including laboratory diagnostic methods.

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

- Review communicable diseases emerging in the Pacific Northwest.
- Define the factors related to emergence.
- Describe the importance of three significant emerging pathogens.
- Describe laboratory methods for three significant emerging pathogens.

MARCIA GOLDOFT, MD
Medical Epidemiologist
Washington State Department of Health
Seattle, WA

Visit the Exhibits
5:00 PM - 7:00 PM
Beverages and Hors d'oeuvres available

Session # 17
7:00 PM - 9:00 PM
2.0 Contact Hours
Basic

It's a Dirty World Out There. Practice Infection Control

How clean is your office, home bathroom, public restroom? How safe are tooth-picks in a restaurant? No longer are antibiotic resistant organisms found mainly in a health care setting. Community Acquired Methicillin Staph aureus (CA-MRSA) and C. difficile are found increasing rapidly in the community. This session will address antibiotic resistant organisms, how infections are spread, how to prevent the spread of infections and proper hand hygiene techniques both in healthcare settings and in the community.

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

- Demonstrate proper hand hygiene.
- Define Community Acquired Methicillin Resistant Staph aureus (CA-MRSA).
- Describe how infections are spread and how to prevent the spread.

Rhonda M Pikelny, CIC, CLS, MT
Infection Control Practitioner
Group Health Cooperative
Seattle, WA

Session # 18
7:00 PM - 9:00 PM
2.0 Contact Hours
Basic

Natural History of HPV infection (Epidemiology) and HPV Vaccine Update

This session will focus on the world and USA statistics on prevalence and incidence of HPV infection. Topics will include the route of transmission of HPV infection, risk factors for acquiring HPV infection, natural course of HPV infection and role of HPV infection in pathogenesis of cervical cancer.

We will examine the current success and problems with controlling cervical cancer (Papanicolaou screening, and novel methods). The focus is on the basic data on the currently available HPV vaccine(s), data on the vaccine efficacy and current recommen-dation for HPV vaccination.

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

- Describe the prevalence and incidence of HPV infection and its significance in relationship to cervical cancer worldwide and in the United States.
- Outline the natural history of HPV infection and its role carcinogenesis.
- Describe current recommendations for HPV vaccine in the USA.

Annette Sabath, MD
Assistant Professor, Pathology
Harborview Medical Center
Seattle, WA

Session # 19
7:00 PM - 9:00 PM
2.0 Contact Hours
Basic

Putting Power into Patient Safety Interventions in the Clinical Laboratory

This lecture describes why laboratory errors occur and outlines strong strategies for error reduction. Topics covered include:

- √ How organizations slowly drift into an error-prone condition,
- √ Distinguishing weak from strong patient safety interventions in the clinical laboratory,
- √ Examples of strong interventions including automation, instrument consolidation, autovalidation, electronic medical records, and more.

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

- Define the "just culture" and how it contributes to error identification and the response to human errors.
- Describe the concept of "drifting" into an error prone state.
- Given a particular type of laboratory error, name one weak intervention and one strong intervention to reduce the error.

MICHAEL L. ASTION, MD, PHD
Professor, Department of Laboratory Medicine
University of Washington
Seattle, WA

Session # 20
7:00 PM - 9:00 PM
2.0 Contact Hours
Basic

Women and Heart Disease

Heart Disease is one of the leading causes of mortality in women. This session will cover the risks and risk factors of heart disease in women, and help you to understand how to decrease the risk of heart disease in women. We will also discuss how to approach the underlying cause of Cardiovascular disease in women including Metabolic Syndrome and the inflammatory process associated with CAD and Diabetes. The session will address diet and lifestyle issues that predispose a woman to Cardiovascular disease.

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

- Describe the risk factors for heart disease in women.
- Describe the risk of heart disease in women.
- Describe how to decrease risk of heart disease in women.
- Describe Metabolic Syndrome and specific tests and biometric measurements that help with diagnosis.

PATHMAJA PARAMSOTHY, MD
Assistant Professor of Medicine
University of Washington Medical Center
Harborview Medical Center
Seattle, WA

JANA NALBANDIAN, ND
Associate Professor and Department Chair of Clinical Sciences
Bastyr University
Kenmore, WA

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

Current Topics in Immunohematology

Blood component therapy involves ABO and Rh typing of the patient, performing component processing, and measuring the clinical efficacy of the transfusion. First, we will discuss common ABO and Rh discrepancies exploring their impact on other laboratory areas and reviewing resolution techniques and controls.

We will then review blood components, secondary processing for specific patient groups including HSCT recipients and neonates, and issues related to quality, purity, and potency of plasma and red cell components.

Finally, we will utilize case studies to examine coagulopathies. Principles of coagulation and laboratory testing will be reviewed before emphasizing the selection of appropriate blood components and the expected therapeutic effect.

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

- Identify the four major types of ABO and D testing discrepancies in patient testing.
- Discuss problem resolution techniques and blood substitution strategies and analyze the root cause both common and uncommon discrepancies.
- List the reasons that plasma reduction of platelets are performed.
- Describe the red call products prepared specifically for neonate patients.
- Identify method of ensuring the purity, potency and safety of blood components.
- Describe the basic principles of hemostasis and indications for platelet, plasma and cryoprecipitate transfusions.
- Describe the use, and possible limitations of, coagulation screening tests for assessing hemostasis.

Evelyn Lockhart, MD
Assistant Medical Director, Hemostasis Laboratory
Puget Sound Blood Center
Seattle, WA

Renée Thorkelson, BS
Internal Training Coordinator, Transfusion Services Laboratory
Puget Sound Blood Center
Seattle, WA

Roxann Gary, MT(ASCP) SBB
Internal Training Coordinator, Transfusion Service Lab
Puget Sound Blood Center
Seattle, WA

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

Hemophilia: A Team Approach to Diagnosis & Treatment

In this session we will discuss the diagnostic testing, clinical manifestations, and therapy of congenital & acquired Hemophilia A & B. The speakers will use case studies to illustrate the successful collaboration of laboratory and clinician for the benefit of the patient.

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

- Describe the diagnosis of hemophilia.
- Outline the clinical presentation of hemophilia and its management.
- Discuss the role of team members to diagnose and manage inhibitor patients.

Laura M. Stewart, BSMT
Hemostasis Specialist
Puget Sound Blood Center
Seattle, WA

Renée M. Killian, RN, MPH
Clinical Nurse Specialist
Puget Sound Blood Center
Seattle, WA

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

Molecular Diagnostic Approaches to Infectious Diseases

Molecular based methods have proven extremely valuable in the diagnosis of a variety of infectious disease pathogens. This three hour session will review molecular diagnostic approaches for identification of Cystic Fibrosis (CF) pathogens, culture-negative infections, and pertussis whooping cough at Children's Hospital and Regional Medical Center, Seattle.

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

- Describe bacterial identification by DNA sequencing and correlation with phenotypic identification.
- Outline the significance of molecular- based bacterial detection in culture negative specimens.
- Describe the molecular diagnosis of pertussis whooping cough.

Joan Guzzo, MT(ASCP)
Clinical Lab Scientist
Children's Hospital and Regional Medical Center
Seattle, WA

Xuan Qin, PhD
Director, Microbiology Laboratory
Children's Hospital and Regional Medical Center
Seattle, WA

Anne Marie Buccat, MS, MT(ASCP)
Supervisor, Cystic Fibrosis Microbiology Research Laboratory
Children's Hospital and Regional Medical Center
Seattle, WA

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

Pre-Analytical Laboratory Errors

Pre-analytical errors constitute the highest percentage of errors in the clinical laboratory. Eliminating these errors requires an understanding of common blood collection practices that directly or indirectly cause erroneous laboratory test results. This presentation will discuss the major categories of pre-analytical errors and how to reduce or eliminate them.

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

- Identify the significant pre-analytical errors that can occur during blood specimen collection and transport.
- Explain the various means of pre-analytical error prevention.
- List proactive steps to reduce potential pre-analytical errors.

TIM GUIRL, MT(ASCP)
Instructor, Health and Human Services Division
North Seattle Community College
Seattle, WA

Failure of Healthcare Professionals to Interpret Fecal Occult Blood Tests Accurately: "Ten-Year Trip via Point-of-Care Program"

Fecal Occult blood tests are one of the tests that need to be interpreted correctly. The advantages and disadvantages of FOBT used as a screening method for colorectal cancer at the point-of-care will be described. This session will provide a 10 year history of information regarding the failure of healthcare professionals to interpret the fecal occult blood tests accurately. The mechanisms of the fecal occult blood testing will be explained to provide participants with a thorough understanding. Alternative testing will be discussed, along with the evolution of future FOB testing.

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

- Explain the mechanisms for fecal occult blood testing (FOBT).
- Describe advantages and disadvantages of FOBT as a screening method for colorectal cancer at point-of-care.
- Discuss alternate or evolving future FOB tests.

SHARON NORMAN MBA, MT(ASCP), CLS (NCA)
Ancillary/ Point-of-Care Testing Coordinator
VA Puget Sound Health Care System
Seattle, WA

Last chance to visit the exhibits.
Friday 11:30 AM - 2:00 PM

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

Antimicrobial Resistance – Molecular Mechanisms, Clinical Implications, and Laboratory Detection.

This session will present the current molecular mechanisms in antimicrobial resistance genes, including the origin and dissemination. The importance of the clinical implications of the antimicrobial resistance will be discussed. The participant will learn about the newest laboratory characterization and reporting of resistant organisms.

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

- Describe molecular mechanisms of antibiotic resistance.
- Define the clinical difficulties in treatment and control of infections caused by the resistant organisms.
- Outline laboratory tools in detection and characterization of such resistant organisms.

XUAN QIN, PHD
Director, Microbiology Laboratory
Children's Hospital and Regional Medical Center
Seattle, WA

Insights on the Interaction Between Fungal Cells and Antifungal Drugs

Dr. White will describe the issues surrounding antifungal drugs, including their mechanisms of action and specificity, and issues surrounding the response of fungal cells to those drugs in susceptible and resistant cells. Topics to be covered include MIC analysis, clinical breakpoints, and the 90/60 rule. Phenotypes associated with resistance will be described, including inducible resistance, transient resistance, and heterogeneous resistance. All of these factors are important in determining the significance of in vitro fungal resistance to clinical success.

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

- Describe the mechanisms of action and fungal specificity of the antifungal drugs.
- Correctly interpret drug susceptibilities as determined in a clinical microbiology setting.
- Describe and discuss the fungal cell phenotypes associated with the response to antifungal drugs.

TED WHITE, PHD
Professor, University of Washington and Full Member, SBRI
Seattle Biomedical Research Institute
University of Washington
Seattle, WA

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

Case Studies in Urinalysis

The first part of the session will be a review of routine urinalysis using illustrative case studies. This session is designed for the student studying for certification exams, or as a review for the cross training laboratorian. The second part of the session focuses on disease processes that are characterized by abnormalities in both urine microscopic and renal biopsy results. Key pathologic features of disease processes will be discussed.

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

- Discuss the chemical principle, clinical significance, specificity, sensitivity, and sources of error for urinalysis reagent strips.
- Correlate reagent strip results with each other and with disease states.
- Use photomicrographs to recognize formed elements in urine sediments.
- Compare and contrast manual and automated urinalysis.
- Compare normal and abnormal renal biopsy features.
- Correlate laboratory findings with pathologic features of renal diseases.

BERNADETTE RODAK, MS, CLSpH(NCA)
Professor of Pathology and Laboratory Medicine
Indiana University
Indianapolis, IN

Sponsored by Iris Diagnostics

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

Discovering Your Future Possibilities

This session allows the attendees to access their life experiences and discover how those life experiences could be used to lead a more enjoyable and satisfying life. We will use a special method of charting our future possibilities during this session. Each person will start their journey using a special scrapbook that is provided with the session registratikon fee.

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

- Access their life experiences.
- Apply their life experiences to other areas of life that will bring them more joy and satisfaction.
- Describe how to chart their future possibilities in a special scrapbook.

BARBARA ROBINETT, MT(ASCP)
Hematology Technical Manager
Group Health Cooperative
Tukwila, WA

Session limited to 25 participants

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

Pitfalls of Antibody Identification

Red cell antibody identification is a complex task. The process of antibody identification is full of potential pitfalls that may adversely affect the outcome. Antibodies can be missed entirely (not always bad) or misidentified. Insignificant reactivity may be detected. The methodologies (solid phase, gel, tube) and enhancement media (LISS, PEG, albumin) used can often contribute to some of the problems seen in the laboratory. Antibodies showing variable reactivity are often due to antigen characteristics such as variant antigens or the homozygous versus heterozygous genetic background of the red cell producer. In addition, some of the common incorrect assumptions that may be made during the identification process will be discussed. The autocontrol and/or direct antiglobulin test often provide the clues to necessary avoid some of the pitfalls encountered. As with any problem solving process, a look-back at the end is essential for making sure testing results and clinical history were in line with the final conclusion. Methods to perform this final evaluation will be discussed. Antibody identification is a journey that may have “roadblocks” and “detours”. The attendee will learn tools to recognize the problems and deal with or avoid these obstacles.

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

- Describe how different methodologies and enhancement media affect antibody detection.
- Evaluate serum/plasma reactivity in comparison to auto control.
- Describe environmental and structural variations in relationship to antibody identification.

TERESA HARRIS, MT(ASCP) SBB; CQA,CQIA (ASQ)
Sr Associate, Immunohematology Reference Laboratory
American Red Cross
Winthrop, WA

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

Being Fixed 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're left with other alternative preservative/fixative choices. The session will begin with a brief review of protozoa encountered in permanent stool stains (Trichrome). The session will then 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 utilize some of the suggested solutions to the problems. encountered using alternative stool preservation techniques.

GERALD HARMON, MT(ASCP)
Microbiology Educator
LabCorp / Dynacare
Seattle, WA

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

Cytologic Evaluation of Body Fluids

This session will cover the pathophysiology of body fluid formation and major diseases associated with abnormal effusions. We will examine body fluid chemical and cellular composition, and requirements laboratory and cytological analysis. We will cover special topics in fluids including cerebrospinal fluid, synovial fluid and sperm analysis.

Emphasis will be on the cellular component to include:

- √ Methods for cytologic preparation and examination
- √ Cytomorphologic features of malignancy
- √ Classical patterns in cytology
- √ Problems in evaluating mesothelial cells

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

- Discuss formation of various body fluids, and associated major pathologic conditions.
- Understand basic laboratory methods for body fluid evaluation, and requirements for fluid preparations for cytological evaluation.
- Describe normal and abnormal cellular components of major body fluids.
- Describe cytologic malignant features and morphologic patterns of fluid malignancies.

ANNETTE SABATH, MD
Assistant Professor, Pathology
Harborview Medical Center
Seattle, WA

Session # 31
8:30 AM – 11:45 AM
3 Contact Hours
Intermediate

Magnificent Morphology

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 the 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.
- Using mini-cases, determine a working diagnosis and additional laboratory testing needed.

BERNADETTE RODAK, MS, CLSPH(NCA)
Professor of Pathology and Laboratory Medicine
Indiana University
Indianapolis, IN

Session # 32
8:30 AM – 11:45 AM
3 Contact Hours
Intermediate

Constructive and Appreciative Feedback: Creating Opportunities for Higher Performance

Learn how to become more comfortable communicating with people about problems AND achieve positive results in a manner that creates opportunities for continuous improvement and positive outcomes. This session will provide communication tools to positively influence the performance of your employees, co-workers and team members. Participants will discover the compounding power of using recognition as a performance development tool versus its more traditional use as a reward mechanism. We will explore an alternative management methodology that capitalizes on the already present motivation of competent and high performers to influence and improve even the poorest performers. The speaker will discuss how to communicate in a straightforward way that can be received non-defensively. The value of this skill to increasing performance is based upon “one of the best established findings in the research literature, that is, the facilitative effect of knowledge of results upon performance”. (Kim & Hamner, Journal of Applied Psychology, 1976.)

At the conclusion of the training participants will be able to:

- Define the importance of giving constructive feedback AND recognizing positive results.
- Apply a structured approach to giving feedback and recognizing positive results.
- Describe the “appreciative” or compounding value of recognizing positive results.
- Define how to use constructive feedback as a performance development tool.

LINDA MAINS, MA
Independent Consultant
Mains & Associates
Seattle, WA

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

Parasitology

This session will present relevant case studies in parasitology providing basic clinical features and diagnostic approaches to parasitology. Malaria will also be discussed to provide an understanding of the clinical and diagnostic complexity of Malaria.

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

- Describe the basic clinical features of the cases discussed.
- Describe the diagnostic approaches in parasitology.
- Describe the clinical and diagnostic complexity of malaria.

GOTTFRIED SCHMER, MD, MPH-TM
Emeritus Professor of Laboratory Medicine
University of Washington Medical Center
Seattle, WA

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

Hematopathology: A Case Study Approach to the Hematologic Disorders

Both pediatric and adult cases will be used to review hematologic disorders. Morphology and pathophysiology of the major classifications of anemia will be presented. We will emphasize correlation of laboratory testing leading to diagnosis. Additionally, leukocyte disorders will be reviewed with emphasis on morphology and diagnostic testing leading to diagnosis, prognosis and selection of treatment.

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

- Recognize morphologic features of the common anemias.
- Review pathophysiology of the major classifications of anemia.
- Identify laboratory testing which aids in the diagnosis of anemia.
- Recognize basic clinical features of the leukocyte neoplasms.
- Define and classify leukocyte disorders.
- Correlate morphologic features and adjunctive information for clinical diagnosis, prognosis and treatment.

BERNADETTE RODAK, MS, CLSPH(NCA)
Professor of Pathology and Laboratory Medicine
Indiana University
Indianapolis, IN

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

Assertive Communication

Have you ever felt frustrated after a conversation because you didn't communicate as well as you would have liked? Are you reticent to share your ideas and concerns, or do you find that you share them too forcefully? Assertive communication is an essential core skill for enhancing self-esteem while building effective interpersonal relationships, Increase your confidence and professionalism, reduce your anxiety, and gain respect through honest, clear, direct self-expression.

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

- Define three distinct communication styles and the impact of each for effective communication.
- Assess one's own assertive style.
- Apply tools and strategies for communicating more assertively.

DONNA M VAUDRIN, EDD
Organization and Leadership Development Consultant
Vaudrin Associates
Edmonds, WA

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

Update on PT, APTT and D-Dimer Testing

This session will review the rationale behind warfarin and heparin monitoring, including issues with selection and implementation of new reagents as well as result interpretation. The potential impact of pharmacogenomics on warfarin monitoring will be discussed. We will present the use of D-Dimer for DVT/PE detection, including issues with implementation and reporting.

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

- Describe the biology of warfarin and heparin effects, including genetic and acquired variables, and explain critical decision levels of test results.
- Design a protocol for evaluation of new PT/APTT reagents, which assures quality and satisfies inspectors.
- Describe the use and limits of D-Dimer testing for PE/DVT testing.

MICHAEL SUTER, MT(ASCP)SH
Hematology Technical Specialist
OML Laboratories
Springfield, OR

Session sponsored by: Diagnostica Stago, Inc and OML Laboratories

EXHIBITORS & EXHIBIT HALL INFORMATION

Once again, the leading manufacturers and distributors will gather in the Exhibit Hall at the SeaTac DoubleTree to display their wares. This will be the 24th year that they have participated in the NW Medical Laboratory Symposium to provide access for Clinical Laboratorians to the newest products and demonstrate the ability for aiding in the diagnosis and health care of the public.

In addition to the demonstrations in the Exhibit Hall, the Abbott freightliner, Dade van, and the Beckman Coulter van will be in the hotel parking lot with larger pieces of equipment for display.

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 name tag and join the Committee in thanking the vendors for their support. The following companies have registered for space prior to the program printing deadline, for the latest information, please visit the websites.

Abbott Diagnostics
Antek HealthWare
BD Pre-Anaytical Systems
Beckman Coulter, Inc.
Bio-Rad Laboratories
Cardinal Health
Centerchem, Inc.
Clinical Data
Dade Behring Inc.
Diagnostica Stago, Inc.
Fisher Healthcare
Focus Diagnostics
Greiner Bio-One
Hardy Diagnostics
Horiba-ABX, Inc.
Instrumentation Laboratory
International Technidyne
Inverness Medical
Iris Diagnostics
Mayo Medical Laboratories
Millipore Corporation
Modern Laboratory Services, Inc.
Nanogen
Orchard Software Corporation
PAML-PACLAB
PML Microbiologicals
Primus Corporation
Quest Diagnostics Inc.
Remel Inc.
Sebia Electrophoresis
Siemens Medical Diagnostics
Siemens Medical Solutions Diagnostics
Streck
Sysmex
The Binding Site
TimeMed Labeling Systems, Inc.
TREK Diagnostic Systems
Trinity Biotech

EXHIBIT HOURS

WEDNESDAY, OCTOBER 24	EXHIBIT OPENING	**11:30 AM – 2:00 PM**
THURSDAY, OCTOBER 25		**11:30 AM – 2:00 P.M.**
		5:00 PM – 7:00 PM
Beverages & Hors d'oeuvres	*Exhibitor Booth Decorating and Costume contest*	
FRIDAY, OCTOBER 26	EXHIBIT CLOSING	**11:30 AM – 2:00 PM**.

EXHIBITOR PRODUCT LIST

Abbott Diagnostics: Architect Ci8200, C 16000, L 1000; CellDyn Sapphire; CellDyn Ruby.
Antek HealthWare: LabDAQ LIS.
BD PreAnalytical Systems: Push button Wingset; Contact Activated Lancet; Discard tube; Rapid Serum Tube; Urine Collection.
Beckman Coulter, Inc.: CX1600; LH780; Command Central.
Bio-Rad Laboratories: Blood virus & Infectious Disease Controls; D-10 with rack loader, HgbA1c testing; Variant II Turbo; Informatics.
Cardinal Health SP
Centerchem, Inc.: Pefakit PiCT; QuikCoag Reagents & Controls; Pefakit APC-R.
Clinical Data: Envoy 500.
Dade Behring Inc.
Diagnostica Stago, Inc.: Coagulation instruments and reagents.
Focus Diagnostics: Infectious and immunological disease diagnosis.
Greiner Bio-One: VACUETTE® transport line; Safety Products; Automated Decapper.
Hardy Diagnostics: Carrot Broth; Gram Stain Advanced; Cryosavers, Comfort PRO Lab Coats; Loop Caddy, Control Organisms.
Horiba ABX Diagnostics: Pentra 400; Pentra 80 XL.
Instrumentation Laboratory: GEM Premier 4000; GEM Premier 3000; GEM OPL.
International Technidyne Corporation: AVOXimeter; HEMOCHRON Elite.
Inverness Medical: Binax NOW Malaria; Biostar OIA Shigatox; Clearview HIV.
Iris Diagnostics: iQ200.
Mayo Medical Laboratories: Reference Laboratory Services.
Millipore Corporation: Elix Clinical for Analyzers; Milli-Q Advantage; BioPak Clinical.
Modern Laboratory Services, Inc.: Dade Behring Dimension; Siemens-DPC; Sysmex XS-1000i; ITC ProTime; Bayer STATUS.
Nanogen: Cardiac STATUS; Tox STATUS.
Orchard Software Corporation: Laboratory Information System.
PAML-PACLAB: Molecular Center of Excellence; Toxicology testing.
PML Microbiologicals: Microorganisms; Chromogenic Media; Identicult; Duotek.
Primus Diagnostics: Ultra^2 A1c /Variants.
Quest Diagnostics Inc.: Digital Pathology; Anatomical Pathology; Oncology.
Remel Inc.: Microbiology products.
Roche Diagnostics: COBAS® 6000; Urisys™ 1800; Light Cycler 2.0.
Sebia Electrophoresis
Siemens Medical Diagnostics: VERSANT Molecular 440; Trilogy; New ADVIA Centralink.
Siemens Medical Solutions Diagnostics: formally DPC.
Streck: Manufactures hematology, chemistry, and immunology products for the clinical laboratory.
Sysmex: Hematology, chemistry, and urinalysis products.
The Binding Site Inc.: Farrzyme ELOSA; Antiphosphatidyl choline, -glycerol, -ethanolamine, & -phosphatidec acid ELISAs
TimeMed Labeling Systems, Inc: Healthcare labeling.
TREK Diagnostic Systems: Vizion System.
Trinity Biotech: EIA; Coagulation.

For Exhibit Information: Contact **Karen Bennett** at **kebenn@casco.net**

Registration Terms and Conditions

Please Register Early! A registration packet will be prepared for individuals that pre-register for the meeting. Please pick up this packet at the Registration Desk prior to your first session.

Fees: All fees listed on the following page apply only to those registrations received before October 8, 2007. Because of the time needed for mail to reach Spokane, please do not mail the registration form after October 16th. Please phone or e-mail if there is a problem getting the registration mailed in a timely manner. On-site registrants will be assessed a $10.00 on-site registration fee. **Please note that there is a separate fee for the evening session; it is not included in the day fee.**

Member rates are available to new members of ASCLS and/or AMT. **If you are a new member and send your application directly to ASCLS or AMT, please include a copy with your registration form to assure eligibility for this rate.**

Lunch is included in all day registration, which is defined as a morning and an afternoon session on the same day. Evening sessions do NOT count toward all day registration. Lunch is **NOT** guaranteed for late registrations or for on-site registrants.

Attendance Categories

Member: Any person who is a current member in good standing of the American Society for Clinical Laboratory Science or the American Medical Technologists.

Student: Any person who is engaged, at least half-time, in a recognized Clinical Laboratory Science Program leading to either an Associate or Bachelor degree, or one who is in an internship in Clinical Laboratory Science.

Phlebotomist: Defined as any person whose primary responsibility is phlebotomy. The Phlebotomist nonmember category would also apply to medical assistants, LPN, RN, or on-the-job trained individuals working in a physician office laboratory, but does not apply to MT or MLT. AMT's RMA category is eligible for this attendance category.

Payment

Full payment must accompany all registrations. Those registrations received without full payment will be held and the registrant notified. No further action will be taken on these registrations until full payment is received. Please remit in U.S. Dollars only. No credit card payments can be accepted.
If you wish a confirmation, please enclose a self addressed stamped envelope or you may request confirmation by e-mail. Please print your e-mail address clearly.

NO REFUNDS.

Committee members are volunteers and work on the NWMLS outside of their normal working hours. The 2007 Symposium Committee reserves the right to cancel any session due to low registration or speaker conflicts. Changes will be posted on the web site (http://www.asclswa.org). Every effort will be made to contact registrants to select an alternate session.

Registration Questions

For registration questions or information contact:

Denise Pichotta
31706 North Perry Road
Deer Park, WA 99006

Phone: 509-276-7357
E-mail: denise1975@netscape.com

2007 Northwest Medical Laboratory Symposium
October 24 - 27, 2007
DoubleTree Hotel, Seattle, WA

Membership Number
ASCLS _____
AMT _____
New members please include a copy of your membership application with this form to be eligible for member rates.

PLEASE PRINT AND SHOW NAME (as wanted on name badge)

First Name _____ Last Name _____

Address _____

City/State/Zip _____

Day Phone **( )** _____ Evening Phone **( )** _____

Institution _____

City / State _____

E-mail Address _____

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

Would you be willing to serve as a Moderator for any of the sessions you will be attending?
☐ **Yes** ☐ **No**

☐ Check here if you prefer a vegetarian meal.

Please Postmark by October 8, 2007

ADVANCE REGISTRATION FEE SCHELDULE (All Morning plus Afternoon Preregistration INCLUDE lunch)

Member AMT or ASCLS, PFI and PFII (Please see above memberhship affiliation box)

Technical/Administrative Professional

Full Day	____ days	@ $ 90.00	$ ____
Half Day	____ half days	@ $ 45.00	$ ____

Phlebotomist/RMA/COLT

Full Day	____ days	@ $ 40.00	$ ____
Half Day	____ half days	@ $ 20.00	$ ____
Student/Emeritus/Honorary	____ days	@ $ 35.00	$ ____
Student/Emeritus/Honary	____ half days	@ $ 20.00	$ ____

NonMember

Technical/Administrative Professional

Full Day	____ days	@ $160.00	$ ____
Half Day	____ half days	@ $ 80.00	$ ____

Phlebotomist

Full Day	____ days	@ $ 70.00	$ ____
Half Day	____ half days	@ $ 35.00	$ ____

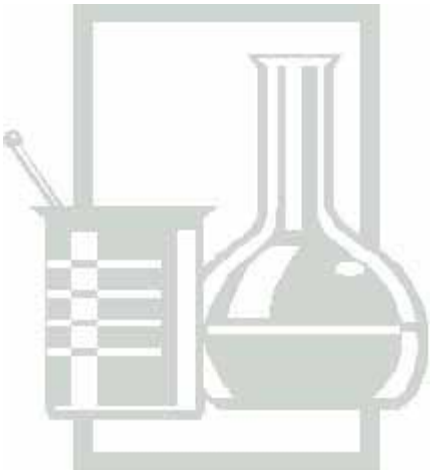
Evening Session Fees

Technical/Professional ASCLS or AMT Member	____ session	@ $ 20.00	$ ____
Technical/Professional Non-Member	____ session	@ $ 30.00	$ ____
Student or Phlebotomist	____ session	@ $ 10.00	$ ____

Total ..... $ _____

Mail to: Denise Pichotta
31706 North Perry Road
Deer Park, WA 99006

Full payment must accompany all registrations. Remit in U.S. dollars. Make check payable to NWMLS



APPLICATION FOR MEMBERSHIP

American Society for Clinical Laboratory Science

Name | Date of Application

Company (School) | Department

Address (School) | City | State/Province | Postal Code

( ) Telephone | ( ) Fax

E-mail Address

Home Address | City | State/Province | Postal Code

( ) Home Phone ☐ Check here if you want to receive your ASCLS mail at home

Have you ever been a member of ASCLS? ____Yes ____No Membership Number _____

SCIENTIFIC ASSEMBLY

Please tell us which Scientific Assembly sections you would like to join. ASCLS's Scientific Assembly sections provide an opportunity for members to network within their own scientific discipline. There is no additional fee for participation. (*choose one primary and one secondary interest*)

PRIMARY	**SECONDARY INTEREST**
__(01)	__(01) biochemistry/urinalysis/ligand immuno-assay
__(02)	__(02) microbiology
__(03)	__(03) laboratory administration
__(04)	__(04) immunology/immunohematology
__(06)	__(06) Histology
__(07)	__(07) hematology/hemostasis
__(09)	__(09) industry
__(10)	__(10) education
__(12)	__(12) phlebotomy
__(13)	__(13) cytotechnology
__(14)	__(14) consultant
__(15)	__(15) inspector/surveyor

CERTIFYING AGENCY AND DESIGNATION:

(4) __NCAMLP __(a) CLS __(b) CLT __(c) other
(5) __AMT __(a) MT __(b) MLT __(c) other
(6) __ASCP __(a) MT __(b) MLT __(c) other
(7) __HHS __(b) CLT __(c) other
(8) __ISCLT __(a) RMT __(b) RLT __(c) other
(9) __Other:

POSITION ***(circle one)***
(P) Lab Director (Admin)
(N) Lab manager
(A) Tech. supervisor
(M) Staff Technologist (CLS)
(4) Staff Technician (CLT)
(t) Phlebotomist
(6) Laboratory Assistant
(I) Faculty Member/Instructor
(K) Program Director
(L) Consultant
(U) Inspector/Surveyor
(2) Marketing/Sales
(J) Other

Please assist ASCLS in collecting the following voluntary statistics to provide analysis of professional trends:

Employment Status:__FT __PT __STU __UNEM __Retired Highest Degree: __H.S. __Assoc. __Bach. __Masters __Ph.D.

Year of Birth: _____ Sex: __F __M SS#_____

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 tax return.

(*ASCLS membership is from the* ***date of payment to the next July 31***.)

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 - $92; Professional II - $70; **plus** State Dues: (see schedule below)

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: $40

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: (see schedule below)

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 Washington or Oregon

*Persons residing in foreign countries are not eligible for these categories—only the Professional categories.

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. Funds Only)
__ Check (payable to ASCLS) __ Visa __ MasterCard __Amex

Exp. date_____ Card #_____

Name on card _____

Signature_____

State Dues Professional I & II
AK, ID, OR, WA $10
Other States .. Please check on the ASCLS web site for correct state fees.

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

At A Glance

Wednesday, October 24, 2007				
	1	2	3	4
8:30 AM to 11:45 AM	Molecular Biology in Immunohem Lab	Tumor Immunotherapy	NKDEP/Creat Restandardization	Regulatory Update
Exhibits: 11:30 AM - 2:00 PM				
	5	6	7	8
2:00 PM - 5:15 PM	Microchimerism	Leadership and Professional Issues	Anemia Diagnosis in Chemistry	Diagnose from Peripheral Smear & Coag
Thursday, October 25, 2007				
	9	10	11	12
8:30 AM to 11:45 AM	Rheumatic Disease Testing	Management Hot Topics	Diagnose & Treat Osteoporosis	Prostatic Hyperplasia and Parathyroid Hormone
Exhibits: 11:30 AM - 2:00 PM				
	13	14	15	16
2:00 PM - 5:15 PM	Method Validation in Chemistry	Updates in Diabetes Management	Overview of Allergy Medicine	Emerging Pathogens, 2007
Exhibits: 5:00 PM - 7:00 PM				
	17	18	19	20
7:00 PM - 9:00 PM	Infection Control	HPV Infection and Vaccine	Patient Safety Interventions	Women and Heart Disease
Friday, October 26, 2007				
	21	22	23	24
8:30 AM to 11:45 PM	Topics in Immunohematology	Hemophilia	Molecular Diag Approach to Infectious Disease	Preanalytical Errors / Occult Blood
Exhibits: 11:30 am - 2:00 PM				
	25	26	27	28
2:00 PM - 5:15 PM	Antimicrobial Reistance / Antifungal Drugs	Urinalysis Case Studies	Future Possibilities	Antibody Identification.
Saturday, October 27, 2007				
	29	30	31	32
8:30 AM - 11:45 AM	Stool Fixation and Preservation	Body Fluids	Magnificent Morphology	Constructive & Appreciative Feedback
	33	34	35	36
1:00 PM - 4:15 PM	Parasitology	Case Studies Hematologic Disorders	Assertive Communication	Update on PT, aPTT, D-Dimer

Northwest Medical Lab Symposium
Denise Pichotta
31706 North Perry Road
Deer Park, WA 99006

2007 Northwest Medical Laboratory Symposium

DoubleTree Hotel
Seattle, WA
October 24 - 27, 2007