

SEPTEMBER / OCTOBER '11

COLA'S

# inSights

INTO  
**Continuing  
Education**

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## FROM THE CHAIR

Our thoughts turn to Autumn with the crisp chill in the air and the changing color of the leaves. Thoughts of Autumn bring “back to school” thoughts as well, but “back to school” is a little bit different at COLA. Since COLA does not offer classroom education, our thoughts are of *continuing* education, which is the focus of this edition of *Insights*. We want to stress the importance we place on education by highlighting the varied methods and products we offer to help you obtain continuing education credits.

First and foremost, we are announcing our change to a new computer platform for hosting our education site. Soon, our website to purchase educational products and complete online courses will have a modern new look and enhanced functionality. We’ve heard what you’ve had to say and we’ve taken steps to implement your suggestions.

This is also true of your feedback for the Symposium for Clinical Laboratories. Another article in this issue of *Insights* expands on new offerings at our next Symposium in Dallas, TX (scheduled for October 19 – 22, 2011). We are offering new technical breakout sessions because you asked us to.

The final article in this edition highlights the online courses we offer as a quick, convenient means of earning continuing education credits.

As the weather gets cooler, I can’t think of a better way to earn CME/CEU credits than by traveling to a warm climate (such as Dallas) or while sipping a mug of hot chocolate while staying snug at home.

W. James Stackhouse, MD, MACP  
Chair, COLA Board of Directors



## COLA INSIGHTS

COLA is sponsored by the American Academy of Family Physicians (AAFP), the American Medical Association (AMA), the American Osteopathic Association (AOA), and the American College of Physicians (ACP); and is endorsed by 29 national and state medical organizations. Letters to the editor are welcome.

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# COLA Launches New Education Platform

## FANTASTIC NEW FACE, FEATURES, AND FUNCTIONALITY

**COLA has been hard at work in recent months creating a new Education platform and converting files to the new system. In the Fall of 2011, you will be able to see the result of that hard work. You will notice a new look and feel to our website, [www.COLA.org](http://www.COLA.org), our online courses, and many of our products.**

When you login to your COLA LabUniversity account, the system welcomes you so you know that you have accessed the correct account. The first feature you'll notice is the new student dashboard, which gives you access to many new features at the touch of a button (or the click of your mouse)!

With one click, you can view a list of the courses and products you have purchased, transcripts of the courses you have completed, or a list of other resources associated with your courses. Also with just a few mouse clicks, you can order additional online courses and/or other educational products.

In anticipation of the new site, we reviewed all of our online courses. Revisions were made as necessary to ensure that our courses provide you with the most up-to-date information possible. In a few instances, it was not possible to revise the courses. Rather than offer you outdated information, we decided to remove these from our course menu.

In addition to the updated material, our courses have been changed in other ways. Once you start your online course, you will notice a modern, new look and the new system promises a smooth navigation throughout the course material, quizzes, and associated resources.

Also, we are working on NEW courses! We have used your suggestions for new course topics and expect to introduce several new courses throughout the coming year. Our LabGuides and other educational products are currently being reviewed and revised, also. We will notify you as these courses and products become available.

Another new system feature combines the purchase mechanism with the Education platform. This means that you will notice a streamlined shopping experience. When questions arise, we will be able to provide you with answers more quickly since we won't have to search multiple sites to track what happened.

You will be able to print your Continuing Education (CME or PACE) certificate as soon as you finish the course requirements. If you have completed an entire Program (such as the Lab Director Program), you will be able to print the certificate documenting that all the courses have been completed. You no longer have to wait to receive this in the mail!

As in the past, the new system automatically tracks your progression through the course and updates your transcripts as courses are completed. A new feature is that you can now enter information about courses you have completed elsewhere. This allows you to have one central location to record all of your Continuing Education efforts! When it is time to provide proof of CE to your employer or certifying agency, you just print and send your transcripts. It's that easy!

Here at COLA, we are very excited about the new system and anticipate that you will share our excitement as soon as it is launched! ■

### We used many of your suggestions and comments to upgrade our Education and Ecommerce Systems!

~

New categories in the COLA store make it easier to find the courses and products you want.

~

Navigation upgrades make it a breeze to take online courses and to access additional resources.

~

Print CME or PACE certificates for completed programs as well as those for individual courses.

~

Keep track of all of your COLA continuing education.

~

Upload non-COLA course information to record your continuing education credits in one central location.

~

Print your complete transcripts.





## Calibration verification/ linearity testing has a new address.

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Calibration verification/linearity testing doesn't get much easier than VALIDATE®. Our liquid, ready-to-use testing kits minimize the need for manual dilutions, saving you time and making your job easier. Plus, you get our promise of 100% satisfaction, backed by experts who are ready to help you with any questions or concerns.

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## Online Continuing Education

EARN CME OR PACE CREDIT WHILE YOU'RE AT WORK OR AT HOME

Don't have the time or money to go to a conference to earn CMEs or CEUs? Then taking courses online is a perfect solution for you! COLA offers online courses so you can learn whenever it's convenient for you. You can log into a course from any computer at any time, and start a new lesson or continue a course from where you ended your last session.

**Online courses address such topics as:**

- CLIA Requirements
- Laboratory Director Responsibilities
- Laboratory Personnel Requirements
- OSHA Requirements
- Proficiency Testing
- Quality Assessment
- Quality Control
- Quality Systems Management
- And many more!

All of COLA's courses are designed to meet your continuing education needs. By completing the quizzes and evaluations included with each course, physicians and nurses can earn CME credits and laboratory staff can earn CEUs (P.A.C.E.® credits\*) toward professional certification and licensing requirements.

**Physicians and nurses:** COLA's courses have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the University of Wisconsin School of Medicine and Public Health, Office of Continuing Medical Education and COLA. The University of Wisconsin School of Medicine and Public Health, Office of Continuing Medical Education is accredited by the ACCME to provide Continuing Medical Education credits.

**Laboratory Personnel:** COLA is approved as a provider of continuing education programs in the clinical laboratory sciences by the American Society for Clinical Laboratory Science (ASCLS) P.A.C.E.® program, Florida Agency for Health Care Administration (CE Broker®), and California Division of Laboratory Science, Department of Laboratory Field Services.

See the following chart for a list of course titles. Click here: COLA Store or visit the COLA Store (on [www.COLAcentral.com](http://www.COLAcentral.com) or [www.COLA.org](http://www.COLA.org)) to learn more about and order our online courses.

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RESOURCES:

\* P.A.C.E. stands for Professional Acknowledgment for Continuing Education. To learn more about the P.A.C.E. program, visit the ASCLS website: <http://www.ascls.org/?page=PACE>



**ONLINE CONTINUING EDUCATION**

<b>CEexpress</b>
1. Getting it Right – Specimen Collection and Instrument Performance
2. CLIA has Changed, Have You?
3. Quality Systems
4. Laboratory Information Systems
5. Prevent Pre-analytic Error
6. Implementing the New COLA Criteria, Part 1
7. Implementing the New COLA Criteria, Part 2
<b>MLE CEexpress</b>
1. Blood Cell Identification
2. Teaching Patients to Check Blood Sugar
3. Urine Sediment Refresher
4. Waived Testing – Doing it Right!
5. Urine Culture Basics
6. Evaluating Red Blood Cells
7. Training and Competency Assessment
8. Introduction to Bloodborne Pathogens
9. Bloodborne Pathogen Safety in the Lab
10. Clinical Microscopy
<b>Webinar CEexpress</b>
2. Personnel Requirements
3. Personnel Responsibilities
4. Proficiency Testing: Understanding the Process
5. Proficiency Testing: Evaluating Your Results
6. Introduction to Quality Control
7. Evaluate QC and Take Corrective Action
<b>Laboratory Training</b>
Best Practices for Performing Waived Tests
Calibration Verification
Verification of Performance Specifications

<b>Lab Director Program</b>
CLIA88 Requirements for the Medical Laboratory
Laboratory Director Responsibilities
Laboratory Personnel Requirements
OSHA Requirements for the Medical Laboratory
Proficiency Testing
Quality Assessment Basics
Quality Control for the Laboratory
QMS: Introduction to Quality Management Systems (found in QMS also)
<b>Quality Management System</b>
QMS: Process Flowcharting
QMS: Quality Manual
QSE: Assessments
QSE: Continual Improvement
QSE: Customer Focus
QSE: Documents and Records
QSE: Equipment
QSE: Facilities and Safety
QSE: Information Management
QSE: Nonconformance Management
QSE: Organization
QSE: Personnel
QSE: Process Management
QSE: Purchasing and Inventory

Courses in the Lab Director Program and Quality Management Systems are available individually or as part of the Program.



# Symposium for Clinical Laboratories

OCTOBER 19 – 22, 2011 | THE FAIRMONT HOTEL | DALLAS, TX

## Join us in Dallas for Great New Educational Sessions!

This year we are offering several new sessions that are geared toward specific audiences including nurses, medical assistants, phlebotomists, QC managers, hospital lab personnel, and laboratory personnel who perform hematology and microbiology testing.

THURSDAY, OCTOBER 20

NURSES, MEDICAL ASSISTANTS, PHLEBOTOMISTS, AND THOSE INVOLVED IN POINT-OF-CARE TESTING

### Phlebotomy CSI (Challenging Sticks Investigation)

*Lisa O. Ballance, BS, MT(ASCP), CLC(AMT)*

Presented in an interactive case study format, participants are led through “investigations” of some of the more common blood specimen collection challenges. Tips to successfully meet the challenges of each case study are examined. Topics include difficult draws, unconventional settings, patient responses, communication barriers, and “solving the crime” of improper specimen collection, handling, and transport.

#### Learning Objectives:

- Summarize four types of patient challenges
- Identify and change practices that kill sample quality and jeopardize accurate results
- Assess specimen collection techniques to reduce preanalytical errors and the risk of patient injury

### Best Practices for Waived Testing

*Elizabeth Staubs, MT(ASCP)SH*

Stressing the importance of good laboratory practices for performing waived testing, we will review elements of waived testing and use them to evaluate and compare different kits and methodologies. Specific points to cover during waived test training and competency evaluations will be identified. Recommended documentation for waived testing will also be discussed.

#### Learning Objectives:

- Perform waived testing following manufacturer’s instructions and good laboratory practices
- Apply 3 elements to compare and evaluate different kits and methodologies
- Use 5 specific elements for review of waived test training and competency evaluation
- Utilize recommended documentation for waived testing

### Diabetes Update: What you need to know about Prevention, Diagnosis and Treatment

*Brenda Montgomery, RN, MS, CDE*

Diabetes and Pre-Diabetes are growing at alarming rates in the United States and throughout the world. We will provide information about evidence based research that can be applied in community settings and tips on how to counsel your patients with pre-diabetes. You’ll learn about new diagnostic criteria which provide options to diagnose diabetes beyond the traditional fasting glucose approach. Information about resources, new initiatives, and materials for diabetes treatment will also be presented.

#### Learning Objectives

- Counsel patients with pre-diabetes
- Apply evidence based research in community settings
- Outline new diagnostic criteria
- Use options beyond the traditional fasting glucose to diagnose diabetes
- Summarize resources, new initiatives, and materials for diabetes treatment

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## QC MANAGERS AND HOSPITAL LAB PERSONNEL

### **Moving from Quality Specifications to a Customized QC Strategy** *Greg Cooper, CLS, MHA, CQA(ASQ) & Curtis Parvin, PhD*



***This presentation includes interactive exercises, so bring a laptop with Excel or a calculator (with SD capability) to easily perform simple calculations.***

This workshop, which consists of four parts, will give participants practical guidance and experience in risk mitigation, as it pertains to the practice of Quality Control. The first part consists of a real-time survey that electronically collects anonymous responses from participants of their current practices and opinions of QC and risk management. A discussion of basic risk mitigation approaches follows.

Participants will then be divided into small working groups, so each group can review and analyze pertinent statistics and specifications for three different tests. The goal is to mitigate a performance problem associated with each test. Each group will then be asked to answer several practical questions. Anonymous responses will be captured electronically and results will be examined. The workshop concludes with each group revealing their recommendations for mitigating the performance problem.

#### **Learning Objectives:**

- Assess current practices and opinions regarding QC activities and risk management
- Summarize basic risk mitigation approaches
- Analyze pertinent statistics and specifications to mitigate a performance problem
- Apply risk mitigation to the practice of Quality Control

### **Impact of QC Frequency on Patient Risk** *John C. Yundt-Pacheco, MSCS*

Assessing and mitigating patient risk is a major driver in healthcare management. Quality control strategies that minimize patient risk are necessary, but difficult to design with traditional tools. We will explore the role that QC frequency has in mitigating the risk of producing unreliable patient results, and why changes in modern clinical diagnostic technology require different QC strategies. We will discuss the importance of QC frequency in designing a QC strategy, and the impact that decisions about QC frequency have on patient risk. Additionally, we will present an approach for mitigating the consequences of clinical diagnostic system malfunctions, as well as a methodology for determining the expected number of unreliable patient results due to an undetected, out of control error condition. Finally, we will discuss optimizing costs while satisfying quality goals.

#### **Learning Objectives:**

- Summarize the role that QC frequency plays in the risk of producing an unreliable patient result
- Estimate the impact of a grave malfunction of a clinical diagnostic system
- Differentiate Time versus Number of Patients while designing a QC strategy that controls patient risk
- Outline the 3 required elements of a QC strategy
- Consider important factors when optimizing a QC strategy for cost while maintaining quality goal

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## **CMS Address Update**



Please note that labs should now send their CMS fees to the following address:

**CMS Laboratory Program  
PO Box 530882, Atlanta, GA 30353-0882**

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**SYMPOSIUM FOR CLINICAL LABORATORIES**

FRIDAY, OCTOBER 21

**LABORATORY PERSONNEL PERFORMING HEMATOLOGY TESTING**

*Presented by Albert Rabinovitch, MD, PhD.*

*Dr. Rabinovitch has emphasized the perspective of solid science and excellent patient care throughout his storied career.*

Dr. Rabinovitch is Pathologist - Director with NovoMetrics, a laboratory consulting organization. In addition to pathology practice and device manufacturer medical direction, he has decades of active voluntary involvement in clinical hematology laboratory instrumentation. He has served as a past Chair of the College of American Pathologist's Hematology Resource Committee, as Vice-Chair of the CLSI Consensus Committee on Quality Systems and Laboratory Practices, and as a member of the CLSI Consensus Committee on Hematology.

**Hematology Interlaboratory Patient Comparisons**

We will explore the various sources of error and variation associated with hematology test results from the perspectives of biological variation, total error, medical goal setting, enhanced use of proficiency testing surveys, intersystem bias, and alternative forms of assessment. We will present the various factors involved in meeting two types of goals with respect to CBC test results:

**General Goals:**

- Define a system to assess if a fresh blood sample yields comparable results across multiple hematology analyzers within a given system of laboratories – not usually a manufacturer's claim
- Define "comparable" in analytic, statistical, and medical senses

**Medical Goals:**

- Ensure that test results accurately reflect patient condition
- Determine if changes in serial samples reflect patient change rather than instrument variation (bias and imprecision)
- Assess if bias shifts patients from one diagnostic group to another
- Decide if serial changes in one patient are significantly different from normal biological variability

**>> CONTINUED ON PAGE 9**



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## SYMPOSIUM FOR CLINICAL LABORATORIES

### Learning Objectives:

- Review and apply criteria for assessing interlaboratory agreement of patient results
- Evaluate data sources to assess state-of-the-art against expert performance goals
- Use provided tools to perform interlaboratory comparisons

### Validation, Verification and Quality Assurance of Automated Hematology Analyzers

An automated hematology complete blood count (CBC) analyzer must provide physicians with reliable medical data for patient management. Truthful data depend upon robust system design, initially *validated* by the manufacturer, and then *verified* by the end-user laboratory. Because CBC analyses are performed on a heterogeneous suspension of blood cells, particular attention to various preexamination aspects are critical to success in generating accurate patient results. While automated hematology analyzers share the same quality control (QC) principles as automated chemistry analyzers, they also have unique characteristics that require some specialized approaches to QC.

### Learning Objectives:

- Summarize the elements of an effective manufacturer's *validation* program for CBC analyzers
- Perform a satisfactory end-user clinical laboratory *verification* of CBC analyzer performance
- Assess the unique aspects of the heterogeneous hematology specimen that require special attention to ensure that CBC analyzers are not "fooled" into yielding wrong results

## LABORATORY PERSONNEL PERFORMING MICROBIOLOGY TESTING

*Presented by Dennis L. Wegner, PhD.*

*Dr. Wegner has a wealth of information to share and can't wait to answer any buggy questions that are bugging you!*

Dr. Wegner is a clinical and infectious disease independent consultant from Ottumwa, Iowa, who has enjoyed working with and helping medical technologists, physicians, and other health care providers for 28 years. He received his PhD in medical microbiology from the University of Wisconsin, and did a postdoctoral internship in clinical microbiology and infectious disease at Henry Ford Hospital in Detroit.

### Blood Culture Techniques that Increase Sensitivity and Optimize Prospective Payment Reimbursements and Gram Stain Directed Management of Bacterial Pneumonia

Apply the latest microbiology techniques and approaches for blood cultures and managing bacterial pneumonia. Hospitals of all sizes, including smaller ones, can provide high quality, patient care oriented microbiology, at a minimum cost, that increases prospective payment reimbursements, reduces hospital stays, and improves the hospital's bottom line.

### Learning Objectives:

- Outline common underlying diseases that predispose to bacterial blood infections, and why it is critical to be able to detect blood infections in patients who are or are not receiving antibiotics
- Summarize the complications associated with blood infections due to common pathogens and their respective potentially lifesaving support measures
- Summarize the sepsis DRG's and assess their huge financial impact on prospective payment reimbursements
- Perform proper blood culture collection
- Interpret how increasing blood culture draw volume increases sensitivity and sepsis reimbursements
- Compare and contrast the available blood culture methods with respect to their sensitivities and abilities to increase sepsis reimbursements
- Interpret why the object of doing sputum cultures is not to grow a pathogen and do automatic sensitivity testing
- Use sputum gram stains to differentiate clinically irrelevant respiratory tract colonization with potential pathogens from those actually causing pneumonia
- Use sputum gram stains to increase prospective payment reimbursements

### No Mercy for MRSA and Stool School

Apply the latest microbiology techniques and approaches for MRSA and stool pathogens. Learn about reducing MRSA prevalence, controlling infection, and providing cost effective therapy. Hospitals of all sizes, including smaller ones, can provide high quality, patient care oriented microbiology at a minimum cost that increases prospective payment reimbursements, reduces hospital stays, and improves the hospital's bottom line.

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# PROLABS

Professional Laboratory Systems

Professional Laboratory Systems (ProLabs) has been assisting private practice physicians with the creation of their in-office laboratories since 1985. We bring the latest in lab technology to the Physicians Office Lab. Chemistry, Hematology, Immunoassay, Auto Immune Testing, Elisa Testing and Lab Information Systems are all areas of expertise for our company. We fully understand the reimbursement system and the economics associated with a successful POL. Most of our business consultation services are available to our clients at no charge and are part of our value added services. Part of the reason ProLabs is still working with office labs we created in 1986 is that we help make laboratories financially successful. That's why we say "ProLabs makes the in-office laboratory work for you"

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[www.prolabs.md](http://www.prolabs.md)



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## SYMPOSIUM FOR CLINICAL LABORATORIES

### Learning Objectives:

- Illustrate the molecular biology of MRSA and how it relates to antibiotic bacterial killing and resistance development
- Analyze the inadequacies of vancomycin single drug therapy to treat life threatening and serious infections due to vancomycin sensitive *Staph aureus*
- Compare the methods available to detect the MRSA carrier state and consider MRSA infection control controversies
- Evaluate a simple test, easy enough to be used in hospitals of all sizes, that quickly differentiates MRSA colonies from colonies of sensitive *Staph aureus*, resulting in immediate implementation of isolation precautions and initiation of proper therapy
- Compare oral therapy alternatives to IV vancomycin and linezolid to treat MRSA wound infections, ear infections, and other non-serious infections
- Select and use appropriate stool culture collection and preservation devices
- Outline the medically critical reasons to do *E coli* shiga toxin testing on all stools submitted for bacterial culture
- Evaluate easy to use test kits that allow hospitals of all sizes to screen for common causes of acute infectious diarrhea and preclude the need to send them to reference laboratories for parasitology ■