The Collaborative Laboratory Conference Steering Committee, Program Committees, AACC-NE Ohio Section, ASCLS-Ohio and CLMA-First Ohio, Six Rivers and Western Lake Erie Chapters are pleased to extend an invitation to YOU to attend “2014 Ohio CLC: An Exploration of Medical Laboratory Science.” Because the quality of your continuing education can directly affect your professional development and achievements, this educational conference is designed by YOU for YOU, the clinical laboratory professional.

Who Should Attend: All clinical laboratory practitioners, educators, students, supervisors, managers, directors, and phlebotomists.

Benefits of Attending:
- Review current technologies and learn new techniques
- Formulate ideas for further development
- Gain insights into future laboratory practice
- Network with your professional colleagues
- Enhance your career potential
- Relax . . Learn . . Share . . Have Fun!

Registration Includes:
- Full Registration:
  - Attendance at all conference sessions
  - Lunch plus morning and afternoon refreshment breaks
  - Wednesday evening dinner
- Daily Registration:
  - All sessions, refreshment breaks and lunch either day

CLC Steering Committee
Melanie Giusti, Co-Chair
Dustin Bunch, Co-Chair
Catherine Shaffner, Treasurer
Pam Kin
Allen Nickels
Shannon Kern
Lisa Kubit
Jane Tester

Facilities/Social/Hospitality
Laura Hook, Chair
Shannon Kern
Kay Hanna

Program Committee
Joe El-Khoury, PhD, Chair
Eugenio Zabaleta, PhD
Aimee Stranyak
Emily Adams
Tom Bierley
Christine Schmotzer, MD
Kathy Heinz (PACE)

Vendors Committee
Allen Nickels, Chair
Paul Labbe

Promotion & Publicity
Pam Kin, Chair
Dustin Bunch (Cvent)
Shannon Kern
Linda Graeter

Registration Committee
Rosanne Kelley, Chair
Lisa Kubit (Cvent)
Jane Tester

Please bring this program brochure with you to the conference
Welcome & Keynote Address

Leadership Across Generations: Understanding How to Leverage the Differences

This year’s Keynote speaker is Jackie Lohdefinck. As a Human Resources Manager at ARUP Laboratories, Jackie provides business support and strategic direction to all levels of management and employees in the areas of strategic management, compensation, benefits, employment law, employee relations, workforce planning, performance management, training, and staff development. She has over 25 years’ experience in human resources, including multinational high-tech organizations and healthcare.

Jackie is a member of the national Society for Human Resource Management (SHRM), the world’s largest association devoted to human resource management. She serves as a member of the Utah Human Resources State Council and the Salt Lake Chapter of SHRM Board of Directors. Jackie served as Chapter President for the Salt Lake Chapter of SHRM in 2012. Jackie earned a Bachelor’s degree in Business Management from University of Phoenix and an Associate’s degree in Business from Brigham Young University, and holds a Senior Professional in Human Resources (SPHR) certification.

Vendor Exhibits & Reception

During the conference, you will have a great opportunity to enhance your learning experience by “Visiting the Vendors” to see and hear about all the newest laboratory instrumentation and testing products.

Thursday, May 8
Vendor Reception: 12:00 pm – 5:00 pm

Vendor Reception: 5:00 pm – 7:00 pm

Friday, May 9
9:30 am – 1:30 pm

At various times during vendor exhibit hours, there will be door prize drawings – but you must be present to win. Be sure to include some time to visit with our vendors / sponsors during the conference. The CLC organizations are extremely grateful for the generosity from our laboratory industry vendor friends that allow us to provide affordable continuing education to Ohio’s laboratory professionals. A complete listing of vendor exhibitors and sponsors will be provided to all conference attendees.
# Program at a Glance

## 2014 OHIO COLLABORATIVE LABORATORY CONFERENCE

**An Exploration of Medical Laboratory Science**

**May 7 – May 9, 2014**

### Wednesday, May 7

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30 – 5:00</td>
<td>Registration</td>
</tr>
</tbody>
</table>
| 1:00 – 2:00   | **W1** Want to 'Spice' up Your Life? Or Relax with some 'Bath Salts'? A Toxicology Primer on Designer Drugs  
               Douglas E Rohde, MS, F-ABC, MLT(ASCP)  
               **W2** What happens when Micro really goes 24/7? MALDI-TOF and Total lab Automation Workflow Management  
               Katharine Roman, MT(ASCP)SM, CI(CBIC)  
               **W3** Antigen, Antibody and the Complement: A Review of Innate and Adaptive Immunity  
               Craig Clifford, MD, MS |
| 2:00 – 2:30   | Refreshment Break                                                       |
| 2:30 – 3:30   | **W4** Molecular HIV Genotyping by Next Generation Sequencing  
               Richard Gibson  
               **W5** Quality Control of Clinical Hands-on Training in the Workplace  
               Emily Witt, BS, CCMA  
               **W6** System-Wide Implementation of Roche Accuchek Inform II Glucometer System: Lessons Learned  
               Linda M Sandhaus, MD & Lois Schultz, MT(ASCP) |
| 3:45 – 4:45   | **W7** TB Skin Test vs IGRA  
               Ike Northern, MT(ASCP)SM  
               **W8** Pulling the Hair Out of a Pediatric Clinical Chemist  
               David J Thornton, PhD, DABCC  
               **W9** The 4 R’s of Laboratory Medicine: Right Patient, Right Time, Right Test, Right Result  
               Teresa Williams, BS, MT(ASCP) |
<p>| 5:00 – 7:00   | Dinner                                                                  |
| 7:00 – 9:00   | ASCLS-OH Board of Directors Meeting(s)                                  |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 5:00</td>
<td>Registration</td>
</tr>
<tr>
<td>8:00 – 8:30</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>8:30 – 9:30</td>
<td>T10 Hematology in the Geriatric Population – “All Is Not Golden”</td>
</tr>
<tr>
<td></td>
<td>Roslyn McQueen, PhD, CCRC, MT(ASCP)SH</td>
</tr>
<tr>
<td></td>
<td>T11 Tackling Specimen Hemolysis From Draw To Result</td>
</tr>
<tr>
<td></td>
<td>Christine Schmotzer, MD</td>
</tr>
<tr>
<td></td>
<td>T12 Bioterrorism Review And Selected Case Studies In Microbiology Subject</td>
</tr>
<tr>
<td></td>
<td>George Kallstrom, PhD, (D)ABMM</td>
</tr>
<tr>
<td></td>
<td>T13 Collaboration Nation: Design And Delivery Of An Interprofessional Education Activity For Medical Laboratory Science Students</td>
</tr>
<tr>
<td></td>
<td>Lisa Walden, MEd, MLS(ASCP)CM</td>
</tr>
<tr>
<td>9:30 – 9:45</td>
<td>Refreshment Break</td>
</tr>
<tr>
<td>9:45 – 10:45</td>
<td>Welcome &amp; Keynote Address T14: Leadership Across Generations: Understanding How to Leverage the Differences</td>
</tr>
<tr>
<td></td>
<td>Jackie Lohdefinck, SPHR</td>
</tr>
<tr>
<td></td>
<td>Sponsored by ARUP Laboratories</td>
</tr>
<tr>
<td>11:00 –12:00</td>
<td>T15 Accountable Leadership: Managing and Motivating Difficult Employees</td>
</tr>
<tr>
<td></td>
<td>Jackie Lohdefinck, SPHR</td>
</tr>
<tr>
<td></td>
<td>Sponsored by ARUP Laboratories</td>
</tr>
<tr>
<td>12:00 – 1:30</td>
<td>Luncheon &amp; Visit Vendors</td>
</tr>
<tr>
<td>1:30 – 2:30</td>
<td>T19 The Hepatitis Alphabet And Test Menu. Which Test At Which Time?</td>
</tr>
<tr>
<td></td>
<td>Thomas S Alexander, PhD, D(ABMLI)</td>
</tr>
<tr>
<td></td>
<td>Thomas S Alexander, PhD, D(ABMLI)</td>
</tr>
<tr>
<td>3:45 - 4:00</td>
<td>Refreshment Break/Visit Vendors</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>T27 Getting Childhood Lead Out of Ohio, and the US</td>
</tr>
<tr>
<td></td>
<td>David Thornton, PhD, DABCC</td>
</tr>
<tr>
<td></td>
<td>T28 Recent Trends in Autoimmune Disease Testing</td>
</tr>
<tr>
<td></td>
<td>M Qasim Ansari, MD</td>
</tr>
<tr>
<td></td>
<td>T29 Review of High Sensitive Troponin Assays: Do We Really Need the ‘Ultra’ Sensitive Troponin?</td>
</tr>
<tr>
<td></td>
<td>Vincent Ricchiuti, PhD</td>
</tr>
<tr>
<td>5:00 – 7:00</td>
<td>Vendor Reception</td>
</tr>
</tbody>
</table>

**Thursday, May 8**
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 3:30</td>
<td>Registration</td>
</tr>
<tr>
<td>7:30 – 8:30</td>
<td>ASCLS-OH Member Business Meeting</td>
</tr>
<tr>
<td>8:00 – 8:30</td>
<td>Continental Breakfast/Networking</td>
</tr>
</tbody>
</table>
| 8:30 – 9:30  | **F30** What is IPE (Interprofessional Education) and Where Does The Laboratory Fit In?  
Gideon Labiner, MS, MLS(ASCP)CM |
|              | **F31** The Diagnostic Value of Bronchial Alveolar Lavage            
Samir B Kahwash, MD |
|              | **F32** Demystifying Metabolic Testing: Organic Acid Analysis        
Amy L Pyle, PhD, DABCC, FACB |
|              | **F33** Urinalysis Review with Case Studies                           
John H. Landis, MS, MT(ASCP) |
| 9:30 – 10:00 | Refreshment Break/Visit Vendors                                       |
| 10:00 – 11:00| **F34** The Maturation, Morphology and Mystery of Leukocytes         
John H Landis, MS, MT(ASCP) |
|              | **F35** Emerging Mycoses in the Headlines                             
Marcia Lee, MLS(ASCP)CM, MS, DVM |
|              | **F36** What Can Standard Chromosome Assays Tell Us?                  
RuthAnn B Pfau, PhD, FACMG |
|              | **F37** Preparing for the BOC Exam - A Brief Review and Action Plan   
Charity Accurso, PhD, MT(ASCP) |
| 11:15 – 12:15| **F38** The Molecular Profile of Hematologic Malignancies: DNA to Diagnosis 
Kristin Landis-Piwowar, PhD, MLS(ASCP)CM |
|              | **F39** Hot Topics in Public Health                                  
Tammy Bannerman, PhD, D(ABMM) |
|              | **F40** The Bad, the Worse, and the Ugly of Acute Promyelocytic Leukemia 
Melissa Burchfield, MT(ASCP) |
|              | **F41** Case Studies in Blood Transfusion and Immunohematology        
Elizabeth Hertenstein, MS, MT(ASCP)SBB |
| 12:15 – 1:30 | Lunch/Vendor Exhibits                                                 |
| 1:30 – 2:30  | **F42** HIT Me! Laboratory Support for the Diagnosis and Management of Heparin-Induced Thrombocytopenia 
Pual Steele, MD |
|              | **F43** Transfusion Reactions: From the Bedside To The Blood Bank And Back 
Hollie M Reeves, DO |
|              | **F44** Monocyte Activation in HIV Disease, a Potential Link to Coagulation Risk? 
Nicholas Funderburg, PhD |
|              | **F45** Clinical Chemistry Cases: Why Order That Test?                
Linda S Gorman, PhD, MLS(ASCP) |
| 2:30 – 2:45  | Refreshment Break                                                    |
| 2:45 – 3:45  | **F46** New Insights into Factor V Leiden: Should We Test Or Not?     
Josphp Wiencek |
|              | **F47** Inflammation Testing to Define Cardiovascular Risk            
Michelle Beidelschies, PhD |
|              | **F48** Clinical and Biochemical Characteristics of Congenital Adrenal Hyperplasia (CAH) 
Dustin R Bunch, BA |
|              | **F49** Thrombotic Thrombocytopenic Purpura (TTP): a Rare, Life-Threatening Disease 
Sara M Falzarano, MD |
| 2:30 – 5:00  | Academic Challenge & Student Mixer                                  |
Please note that the “level of instruction” is designated as Basic (B), Intermediate (I) or Advanced (A) following the title for each session.

W1. Want to 'Spice' up your life? Or relax with some 'Bath Salts'? A Toxicology Primer on Designer Drugs (I)
Douglas E Rohde, MS, F-ABC, MLT(ASCP)
Supervisor of Chemistry & Toxicology
Lake County Crime Laboratory
According to the Office of National Drug Control Policy, synthetic cannabinoids, commonly known as “K2,” or “Spice,” are often sold in legal retail outlets as herbal incense or potpourri and synthetic cathinones are often sold as “bath salts” or “jewelry cleaner”. These new designer drugs are labeled “not for human consumption” to mask their intended purpose and avoid FDA regulatory oversight. Use of synthetic cannabinoids is alarmingly high, especially among young people. According to the 2012 Monitoring the Future survey of youth drug-use trends, one in nine 12th graders in America reported using synthetic cannabinoids. This rate, unchanged from 2011, puts synthetic cannabinoids as the second most frequently used illegal drug among high school seniors after marijuana. 51 new synthetic cannabinoids were identified in 2012, compared to just two in 2009. Furthermore, 31 new synthetic cathinones were identified in 2012, compared to only four in 2009. In addition, 76 other synthetic compounds were identified in 2012, bringing the total number of new designer drugs identified in 2012 to 158. This alarming trend will be discussed as well as the attempts at government regulation and analytical detection of these substances.

W2. What happens when Micro really goes 24/7? MALDI-TOF and Total lab automation workflow management (I)
Katharine Roman, MT(ASCP)SM, CIC(CBIC)
Manager, Microbiology Laboratory
University Hospitals Case Medical Center
Let's talk microbiology. A basic overview of MALDI-TOF, TLA, and PCR technologies as they apply in the microbiology laboratory will be presented. LIS and instrument interface complexities brought about by these technologies will be explored as well. The logical progression arising from the availability of these technologies is reporting cultures round the clock so let's talk spend some time talking about that! It can be difficult to imagine it all on your own when the best idea is a chair away so let us put our heads together to wrap it all up!!!

W3. Antigen, Antibody and the Complement: A Review of Innate and Adaptive Immunity (I)
Craig Clifford, MD, MS
Clinical Medical Assisting Instructor-Curriculum Advisor
Ohio School of Phlebotomy
During the lecture, the cellular components of the adaptive and innate immune system will be reviewed, including origin, development, differentiation, and genetic specificity. T-cell education, recombination, MHC class I and II interaction, and signal transduction will be examined with some detail. Additionally, production of antibody by B-cells with special emphasis on activation of the complement system will be discussed.

W4. Molecular HIV genotyping by next generation sequencing (B)
Richard Gibson
Assistant Director
University Hospitals Case Medical Center
Our novel all-inclusive HIV-1 genotypic and coreceptor tropism assay, based on deep sequencing of the protease, RT, integrase, and env C2V3 region, permits the multiplexed detection of low level drug-resistant and/or non-R5 viruses in up to 95 clinical samples simultaneously. This comprehensive test, the first of its class, could be instrumental in the development of new antiretroviral drugs and will aid in the treatment and management of HIV-infected individuals.

W5. Quality Control of Clinical Hands-on Training in the Workplace (B)
Emily Witt, BS, CCMA
Medical Education Coordinator
Ohio School of Phlebotomy
In order to ensure quality specimens, testing, and patient care, proper employee training techniques must be developed and utilized within the clinical workplace. After this presentation, attendees will be prepared to oversee training using a structured plan to ensure the adoption of best practices.

W6. System-wide implementation of Roche Accu-chek Inform II glucometer system: lessons learned (I)
Linda M Sandhaus, MD
Associate Professor of Pathology  
Medical Director of Core Hematology Laboratory and of  
Point-of-Care Testing  
University Hospitals Case Medical Center

Lois Schultz, MT(ASCP)  
Point-of-Care Technical Coordinator  
University Hospitals Case Medical Center  

This talk will focus on the implementation of the Roche Accu-check Inform II glucometer system throughout the University Hospitals Health System network. Centralized leadership, frequent and effective communication, engagement, and collaboration across multiple departments and disciplines were critical to success. The speakers will highlight specific planning and logistics challenges, such as establishing a realistic timeline, transitioning data management systems, training operators, accomplishing connectivity through multiple interfaces, and instrument roll-out.

T11. Tackling Specimen Hemolysis from Draw to Result (B)  

Roslyn McQueen, PhD, CCRC, MT(ASCP)SH  
Certified Clinical Research Coordinator  
Hurley Medical Center  

Aging is a fact of life and global aging is occurring at a record-breaking rate. Yet disease and disabilities are not necessarily a function of age. The aging process is associated with the functional decline of several organs, such as cardiovascular, renal, musculoskeletal, pulmonary, and bone marrow reserve. As the body ages, certain cells lose their ability to divide and age-related deficits occur in bone marrow progenitor cells. It’s important to distinguish age-related physiological changes from disease-related pathological processes. This talk will focus on hematologic changes in the elderly. It will describe hematologic reference ranges of various geriatric age groups and discuss hematopathologic changes observed in the geriatric population.

T12. Bioterrorism Review and Selected Case Studies in Microbiology (B)  

George Kallstrom, PhD, (D)ABMM  
Microbiologist  
Summa Health System  

This discussion will provide an overview of biological weapons and biodefense countermeasures. A historical perspective on the evolution of biowarfare/biodefense and modern threats of bioterrorism will be covered. As time permits, case studies in clinical microbiology will be presented.

T13. Collaboration Nation: design and delivery of an interprofessional education activity for medical laboratory science students (B)  

Lisa Walden, MEd, MLS(ASCP)CM  
Director, West Central Ohio Medical Laboratory Science Program  
Ohio Northern University  

Medical laboratory science students participated in a novel interprofessional case study activity with students from excise physiology, nursing, and pharmacy. Activity objectives included providing opportunities for students to work collaboratively to solve problems, exposing students to other healthcare disciplines, improving curricular connectivity, and practicing team communication and decision making. The design, delivery, and outcome of the activity will be presented.
T14. KEYNOTE: Leadership Across Generations: Understanding How to Leverage the Differences (B)
Jackie Lohdefinck, SPHR
Human Resources Strategic Business Partner
ARUP Laboratories

This session will explore the differences and similarities of the five generations in today's workforce. You'll better understand how life experiences shape each generation's characteristics, skills and values and gain insights about how these attributes both challenge and enhance the work environment. Ideas for more meaningful communication across generations, and development of employee engagement and retention strategies will be shared.

Sponsored by ARUP Laboratories

T15. Accountable Leadership: Managing and Motivating Difficult Employees (B)
Jackie Lohdefinck, SPHR
Human Resources Strategic Business Partner
ARUP Laboratories

People management skills can be the most challenging but rewarding part of leadership. This session will provide practical knowledge and skills to help you be more confidently "response-able" in situations of conflict. Four steps for effective problem solving will be shared to get you on your way to being soft on people, but tough on the problem.

Sponsored by ARUP Laboratories

T16. NK and Regulatory T Cells – New Potential Clinical Applications (I)
J Lynne Williams, PhD, MT(ASCP)
Professor and Program Director, Biomedical Diagnostic & Therapeutic Sciences
Oakland University

Two of the most exciting and (relatively) new areas of Immunology are Natural Killer cells, and Regulatory T cells. Understanding the biology of these unique immune cells is expanding the potential for clinical applications (adoptive immunotherapy) in a variety of disease settings.

T17. Chronic Disease, Biomarkers, and Nutrition: The Rest of the Story (B)
Kathy V Waller, PhD, MLS(ASCP)
Associate Professor
The Ohio State University

Cancer, cardiovascular disease, diabetes, and obesity are causes for the top ten deaths in this country. In the laboratory, we utilize biomarkers to screen health status as well as diagnose disease and monitor therapy. In this talk we will discuss how a Whole Food Plant-Based diet can preserve your health and prevent and reverse these chronic conditions.

T18. Updates in Diabetes Diagnosis and Monitoring for Healthcare Professionals (I)
Andrea M Rose PhD, MBA
Senior Clinical Support Consultant
Roche Diagnostics

The presentation covers the prevalence, causes, and consequences of diabetes, plus updates in NGSP and IFCC standardization, CAP proficiency testing and NGSP certification requirements for HgbA1c testing. Potential sources of interference when using HgbA1c for diagnosis and monitoring and how they are related to methodological differences in HgbA1c testing will be described.

Sponsored by Roche Diagnostics

T19. Hepatitis alphabet and test menu - Which test at which time? (I)
Thomas S Alexander, PhD, D(ABMLI)
Immunologist
Summa Health System

The talk will review the various hepatitis virus pathology and laboratory testing. Advantages, disadvantages and performance characteristics of the various hepatitis laboratory tests will be provided. Specific algorithms for which test to use for which clinical presentation will be provided.

T20. Basic, Yet Challenging - Meeting CLIA Regulations (B)
Sandra VanVranken, MS, MT(ASCP)SH
Director, Laboratory Compliance
The Ohio State University Wexner Medical Center

All laboratories must follow CLIA regulations, which can be difficult to interpret and follow. This presentation overviews CLIA regulations for each testing complexity, as well as the four major subparts in Appendix C (interpretative Guidelines). Tracer methodology utilized for inspections and common CLIA deficiencies will also be discussed.

T21. Therapeutic Drug Monitoring of Triazole Antifungal Drugs (I)
Chao Yuan, PhD
Assistant Staff
Cleveland Clinic

Invasive fungal diseases are important causes of morbidity and mortality in immunocompromised patients. To improve patient care, triazole antifungal drugs are often used for prophylaxis and curative treatment. Therapeutic drug monitoring has been suggested due to narrow therapeutic range and toxicity at high concentrations for certain drugs.

T22. Mass Spectrometry in the Clinical Laboratory (I)
Vikram Palamalai, MBBS, PhD
Senior Chemist
Metrohealth

The talk will provide an introduction to the basic concepts in mass spectrometry, discuss the advantages and limitations, provide examples of how mass spectrometry is being used typically today, and end with possible future applications that are currently under research.
T23. ANA testing - A misnomer? Update on new recommendations regarding ANA testing and methods (I)
Thomas S Alexander, PhD, D(ABMLI)
Immunologist
Summa Health System

The talk will review the IFA, ELISA and multiplex ANA methods. Advantages, disadvantages and performance characteristics of the various methods will be provided. A set of new international recommendations for “anti-cellular antibody” detection was recently published (Agmon-Levin, et al., Ann Rheum Dis. 2014 Jan;73(1):17-23) and these recommendations will be reviewed.

T24. True Stories of Point of Care Testing (B)
Edmunds Z Reineks, MD, PhD
Medical Director, Point of Care Testing and Automated Chemistry
Cleveland Clinic

A brief discussion of challenges in point of care testing will be followed by several case studies where testing seems to have gone wrong.

T25. Laboratory testing for pain management (B)
Sihe Wang, PhD, DABCC, FACB
Medical Director
Cleveland Clinic

Pain management has been attracting much attention due to the high potential of diversion and drug abuse. As such laboratory testing plays a critical role to ensure patient compliance. Immunoassays are quick but produce false negative and false positive results. Liquid Chromatography-tandem mass spectrometry has been increasingly used for pain management testing due to its high specificity and sensitivity.

T26. For Patient’s Safety Sake: Laboratory/Nursing - Teamwork (B)
Eugenio H Zabaleta, PhD
Clinical Chemist
MedCentral Health System

The Nation’s healthcare is still being transformed from a solo practitioner to a system approach. In this new healthcare era it is imperative that laboratorians get closer to the patient than ever before. By creating strong teamwork with nursing through their knowledge and expertise, laboratorians will be able to improve patient care and patient safety; after all, significant percentages of the clinical decision are based or influenced by laboratory results.

T27. Getting Childhood Lead Out of Ohio, and the US (B)
David J. Thornton, PhD, DABCC
Director, Core Laboratory and Laboratory Information Systems
Nationwide Children's Hospital

This session will describe the clinical and biological effects of exposure to lead, and its history. A brief overview of how lead is tested and some interesting cases of lead poisoning will be provided. We will present State of Ohio and US data showing how exposure to lead has decreased over the past several years.

T28. Recent Trends in Autoimmune disease testing (I)
M Qasim Ansari, MD
Immunopathologist
Cleveland Clinic

A brief overview of autoimmune diseases and laboratory tests useful in diagnosis will be presented with emphasis on the Anti-nuclear Antibody tests and other immunofluorescence assays. A comparison of different methodologies will be presented including EIA and multiplex bead assays. New trends regarding automation in IFA assays and the use of bio-chip technology will be mentioned. Newer assays in celiac disease, rheumatoid arthritis and ANCA testing will be discussed and strategies for better test utilization in the immunopathology lab will be discussed.

T29. Review of High Sensitive Troponin assays: do we really need the 'Ultra' Sensitive Troponin? (I)
Vincent Ricchiuti, PhD
Director, Clinical Chemistry and Toxicology
University of Cincinnati Medical Center

The improved analytical characteristics of both sensitive and high sensitivity assays for cardiac troponins I and T have substantially increased the diagnostic sensitivity for early detection of acute myocardial infarction (AMI). With the increased ability to detect small changes of circulating cardiac troponins, any cause of myocardial injury will now produce a substantial greater number of analytically true positive findings not detectable by previous generation of troponin assays. This trend of increased in sensitivity has led to decrease in diagnostic specificity for AMI, a concern to many clinicians who may incorrectly associate any increased cardiac troponin value to an AMI.

F30. What is IPE (Interprofessional Education) and where does the laboratory fit in? (B)
Gideon Labiner, MS, MLS(ASCP)CM
Assistant Professor – Educator
University of Cincinnati

Interprofessional Education (IPE) has become a growing movement. This collaborative approach addresses quality of care issues in health-care delivery. We will look at the evolution of and approaches to IPE, as well as ongoing efforts to support the incorporation of IPE. The focus of this talk will be based on the clinical laboratory’s involvement in these improvement efforts.

F31. The Diagnostic Value of Bronchial Alveolar Lavage (B)
Samir B Kahwash, MD
This presentation will explain the procedure of Bronchoalveolar lavage (BAL), its utility and indication, along with discussion of specimen triage and case examples.

F32. Demystifying Metabolic Testing: Organic Acid Analysis (I)
Amy L Pyle, PhD, DABCC, FACB
Assistant Director, Core Laboratory Services, Department of Pathology and Laboratory Medicine Nationwide Children’s Hospital and Ohio State University
A disease- and case-based review of testing and interpretation of organic acid assays.

F33. Urinalysis Review with Case Studies (I)
John H Landis, MS, MT(ASCP)
Adjunct Professor
University of Cincinnati
Cases of typical and unusual renal and non-renal disorders that affect urinalysis results will be presented. Urinalysis chemistry and microscopic findings will be correlated with disease states.

F34. The Maturation, Morphology and Mystery of Leukocytes (I)
John H Landis, MS, MT(ASCP)
Adjunct Professor
University of Cincinnati
A review of leukocyte morphology and function including maturation and common pathology will be presented.

F35. Emerging Mycoses in the Headlines (B)
Marcia Lee, MLS(ASCP),CM,MS,DVM
Associate Professor
Miami University
Recent fungal epidemics, e.g., white-nose-syndrome attributed to Pseudogymnoascus destructans and fungal infections following injections of Ekserrohium rostratum-contaminated methylprednisolone, will be discussed. Diagnostic laboratory findings and public health strategies to ongoing investigations will be highlighted.

F36. What Can Standard Chromosome Assays Tell Us? (I)
Ruthann B Pfau, PhD, FACMG
Assistant Director, Pathology and Director, Cytogenetics and Prenatal Diagnosis
University Hospitals Case Medical Center
In this era of rapidly changing technologies and ever-deeper knowledge of gene function and mutation, chromosome studies are still widely used in clinical diagnosis and patient care management. This talk aims to explore the fields where chromosome studies and other forms of genome analysis are both available, and to examine the relative strengths and promises of different approaches with examples from clinical cases.

F37. Preparing for the BOC Exam - A Brief Review and Action Plan (I)
Charity Accurso, PhD, MT(ASCP)
Assistant Professor – Educator/Program Director
University of Cincinnati
Preparing for the national examination can be a daunting task, but a little preparation will ensure that you are ready for the big day. This session will provide you with self-assessment techniques, study strategies and plans to put into place in the months prior to your examination day.

F38. The Molecular Profile of Hematologic Malignancies: DNA to Diagnosis (I)
Kristin Landis-Piwowar, PhD, MLS(ASCP),CM
Assistant Professor, Biomedical Diagnostic and Therapeutic Sciences
Oakland University
Historically, morphology and cytochemistries were used to classify hematologic disorders. Current technologies employ molecular techniques to categorize and classify cells by identification of chromosomal aberrations and detection of increased or decreased gene expression and gene products. This session will describe the techniques involved in determining the “molecular profile” of hematologic disorders for accurate diagnostic and prognostic information.

F39. Hot Topics in Public Health Microbiology (I)
Tammy Bannerman, PhD, D(ABMM)
Director, Medical Laboratory Science Division
The Ohio State University
The presentation will introduce current hot topics in public health microbiology; including, influenza and biological agents of terrorism.

F40. The Bad, the Worse, and the Ugly of Acute Promyelocytic Leukemia (I)
Melissa Burchfield, MT(ASCP)
Clinical Lab Services, Lead, Hematology
The Ohio State University Wexner Medical Center
This presentation is on the ins and outs of Acute Promyelocytic Leukemia, including clinical presentation, laboratory results, treatment—and the ramifications if left untreated, in a PowerPoint presentation full of photos, graphs and case studies.

F41. Case Studies in Blood Transfusion and Immunohematology (B)
Elizabeth Hertenstein, MS, MT(ASCP)SBB
Assistant Professor
University of Cincinnati
Case studies in Blood Banking and transfusion medicine will be presented. Included will be a review of basic immunohematology techniques including blood typing, antibody screening and identification. Resolution of
multiple antibodies and ABO discrepancies will also be discussed.

**F42. HIT me! Laboratory Support for the Diagnosis and Management of Heparin-Induced Thrombocytopenia (B)**

Paul Steele, MD  
Medical Director, Clinical Laboratory  
Cincinnati Children’s Hospital Medical Center  
Associate Professor of Pathology and Laboratory Medicine, University of Cincinnati College of Medicine

The clinical diagnosis and course of Heparin-Induced Thrombocytopenia will be discussed. The laboratory’s role in making the diagnosis will be described, and the use of hemostasis laboratory assays to monitor the direct thrombin inhibitor Argatroban, given to manage the disease, will be discussed.

**F43. Transfusion Reactions: from the bedside to the blood bank and back (I)**

Hollie M Reeves, DO  
Assistant Director of Transfusion Medicine  
University Hospitals Case Medical Center

Several case studies will be presented to illustrate the importance of timely recognition and reporting of transfusion reactions, the role of the blood bank in the investigation of transfusion reactions and laboratory management of specific transfusion reactions.

**F44. Monocyte activation in HIV disease, a potential link to coagulation risk (I)**

Nicholas Funderburg, PhD  
Assistant Professor  
The Ohio State University

The mechanisms responsible for increased cardiovascular risk associated with HIV-1 infection are incompletely defined. Using flow cytometry, we examined activation phenotypes of monocyte subpopulations in patients with HIV-1 infection or acute coronary syndromes (ACS) to find common cellular profiles. We also measured several plasma biomarkers that are associated with cardiovascular risk in HIV infected patients.

**F45. Clinical Chemistry Cases: Why Order That Test? (I)**

Linda S Gorman, PhD, MLS(ASCP)  
Associate Professor  
University of Kentucky

Clinical Chemistry reviews try to hit the high points to help those who need to review content connect with the major topics and points of interest. In this presentation various cases will be offered to help you improve your problem-solving skills. Grounded in chemistry cases that use CMPs, organ testing, and testing for hormones and drugs, this presentation is a review of the major points in clinical chemistry. Students needing a review as well as laboratory professionals looking for a review should find this presentation useful and entertaining.

**F46. New Insights into Factor V Leiden: Should we test or not? (B)**

Joseph Wiencek  
Cellular & Molecular Medicine Doctoral Fellow  
Cleveland State University

The cost and benefits of medical care are critical topics in the United States. Reducing the amount of unneeded investigational tests is an ongoing effort in all areas of healthcare. Through a developed understanding of factor V Leiden’s history, prevalence, and recommendations, a strong awareness will be gained to determine the utility or futility for its testing.

**F47. Inflammation testing to define Cardiovascular Risk (I)**

Michelle Beidelschies, PhD  
Director of Clinical Marketing  
Cleveland HeartLab, Inc.

This presentation will introduce a multi-marker approach utilizing inflammation testing to define cardiovascular risk. Time will be spent understanding the value of inflammation testing to assess a patient’s spectrum of risk – from risk of disease due to lifestyle concerns, to presence of disease, and ultimately disease activity and risk for an adverse cardiac event.

**F48. Clinical and Biochemical Characteristics of Congenital Adrenal Hyperplasia (CAH) (B)**

Dustin R Bunch, BA  
Sr. Research Technologist  
Cleveland Clinic

Congenital adrenal hyperplasia is a genetic disease that affects proper steroid production leading to varying physical manifestations. The most common manifestation is ambiguous genitalia. This talk will discuss the physical and biochemical presentation of congenital adrenal hyperplasia from the perspective of a clinical chemist.

**F49. Thrombotic Thrombocytopenic Purpura (TTP): a Rare, Life-Threatening Disease (I)**

Sara M Falzarano, MD  
Resident Physician  
Cleveland Clinic

Thrombotic Thrombocytopenic Purpura (TTP) is a rare microangiopathic thrombotic disorder characterized by hemolysis and thrombocytopenia. It has been associated to decreased level/activity of a metalloprotease, ADAMTS13, leading to presence of unusually large von Willebrand factor multimers. Prompt diagnosis and appropriate treatment are mandatory, the disease being fatal in over 90% of untreated patients.
2014 Ohio Collaborative Laboratory Conference

Sponsoring Organizations

American Association of Clinical Chemistry (AACC)

Northeast Ohio Section Leadership

Christine Schmotzer, MD, Chair
-UH Case Medical Center

Anne Bordner Blank, Chair-Elect
-Cleveland Clinic

Eugenio Zabaleta, PhD, Past Chair
-MedCentral Health System

Lisa Kubit, Program Chair
-Cleveland HeartLab, Inc.

Chao Yuan, PhD, Secretary
-Cleveland Clinic

Sihe Wang, PhD, Delegate
-Cleveland Clinic

David Anderson, PhD, Treasurer
-Cleveland State University

Dustin Bunch, Internet Coordinator
-Cleveland Clinic

Joe El-Khoury, PhD Continuing Education
-Cleveland Clinic

With nearly 10,000 members, AACC is the largest international society of research oriented clinical laboratory professionals, physicians, research scientists and others in the field of clinical laboratory medicine. Founded in 1948, the society is headquartered in Washington, DC. AACC members come from a variety of employment settings: hospital labs (50%), industry (26%) and independent labs (24%). 30% of the membership is international. 23 local area sections and 13 specialty divisions focus on laboratory medicine subspecialties such as Point of Care, Pediatric Maternal Fetal, and Molecular Diagnostics, to name a few.

AACC’s annual meeting and exposition is often held jointly with ASCLS and is the largest in the field of laboratory medicine attracting nearly 20,000 participants and 600 exhibitors. AACC is a major publisher of books and five major periodicals on clinical laboratory science. Clinical Chemistry is an international peer reviewed journal and is the most cited journal in the field. Clinical Laboratory News offers breaking news stories with feature articles and viewpoints from leading clinical laboratory scientists. Clinical Laboratory Strategies addresses the essentials of laboratory management and mastering change in laboratory practice. In addition to the AACC member website, a joint venture with ASCLS, Lab Tests Online (www.labtestsonline.org) has won several awards and hosts more than 700,000 visitors per month. For information on AACC visit www.aacc.org.
American Society for Clinical Laboratory Science – Ohio (ASCLS-Ohio)

ASCLS- Ohio Leadership

Shannon Kern, President
-Proctorville, Ohio

Melanie Giusti, President-Elect
-Florence, Kentucky

Meighan Sharp, Recording Secretary
-Hilliard, Ohio

Marcia Lee, Senior Director
-Hamilton, Ohio

Catherine Shaffner, Treasurer
-Perrysburg, Ohio

Sheila Ng, Junior Director
-Toledo, Ohio

Laura Hook, Senior Director
-Canal Winchester, Ohio

Linda Graeter, Junior Director
-Cincinnati, Ohio

Lisa Kubit, Junior Director
-Cleveland, OH

Aimee Stranyak, Student Director
-Toledo, OH

Founded in 1933, ASCLS is made up of and governed by practitioners in clinical laboratory science. ASCLS-Ohio’s mission is to promote the profession of clinical laboratory science in Ohio and provide beneficial services to those who practice it.

Besides serving on the board of directors, committees or scientific assemblies for ASCLS-OH, members may also choose to work with ASCLS national committees. ASCLS publishes a bimonthly journal, Clinical Laboratory Science, along with a monthly national newsletter, ASCLS Today. ASCLS-OH publishes a newsletter, Ohio CLS Today.

All laboratorians are invited to be members of ASCLS e.g. clinical laboratory scientists, clinical laboratory technicians, histotechnologists, histotechnicians, generalists, specialists, managers/supervisors, phlebotomists and others. Please join us at the ASCLS-OH Membership Booth or find a member at the meeting to learn more about ASCLS and ASCLS-OH, or visit our websites- www.ascls.org and www.ascls-ohio.org.

All ASCLS members including students are encouraged to join the ASCLS-Ohio leadership during the conference at the Board of Directors meeting (which will be held on Wednesday, May 7th at 7 pm) and the Member Business Meeting (which will be held on Friday, May 9th at 7:30 am).
Clinical Laboratory Management Association (CLMA)

First Ohio Chapter Leadership

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Nickels</td>
<td>President</td>
</tr>
<tr>
<td>Louise Headley</td>
<td>Past President</td>
</tr>
<tr>
<td>Katherine Jacob</td>
<td>Treasurer</td>
</tr>
<tr>
<td>Rosanne Kelley</td>
<td>Secretary</td>
</tr>
</tbody>
</table>

Board of Directors:

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clive Hamlin</td>
</tr>
<tr>
<td>Pat Webster</td>
</tr>
<tr>
<td>Jean Komraus</td>
</tr>
<tr>
<td>Ed Lorson</td>
</tr>
</tbody>
</table>

Six Rivers Chapter Leadership

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jane Tester</td>
<td>President</td>
</tr>
<tr>
<td>Emily Adams</td>
<td>President-Elect</td>
</tr>
<tr>
<td>Kathy Good</td>
<td>Past President</td>
</tr>
<tr>
<td>Jenny Murray</td>
<td>Secretary</td>
</tr>
<tr>
<td>Wanda Broerman</td>
<td>Treasurer</td>
</tr>
</tbody>
</table>

Board of Directors:

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Beth Kasper</td>
</tr>
<tr>
<td>Katrina StClair</td>
</tr>
<tr>
<td>Jennifer Douglas</td>
</tr>
<tr>
<td>Rick Kuertz</td>
</tr>
</tbody>
</table>

Western Lake Erie Chapter Leadership

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Bierley</td>
<td>President</td>
</tr>
<tr>
<td>Al Rizzo</td>
<td>President-Elect</td>
</tr>
<tr>
<td>Rhonda Perry</td>
<td>Secretary</td>
</tr>
<tr>
<td>Joan Benya</td>
<td>Treasurer</td>
</tr>
</tbody>
</table>

Board of Directors:

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamela Kin</td>
</tr>
<tr>
<td>Past President</td>
</tr>
<tr>
<td>Mary Slaughter</td>
</tr>
<tr>
<td>Karen Bodeman</td>
</tr>
<tr>
<td>Bonnie VanSchoik</td>
</tr>
</tbody>
</table>

CLMA is an international organization whose membership is responsible for laboratories and clinical services in hospitals, healthcare networks, group practices and independent settings. The First Ohio, Six Rivers and Western Lake Erie Chapters of CLMA are professional organizations dedicated to excellence in clinical services; to enhancing professional, managerial and leadership skills; to promoting efficient, productive and high quality operations; advocating on behalf of quality patient care and chapter membership.

These Chapters provide education, regulatory information and networking opportunities. CLMA provides e-mails with the latest regulatory updates and industry trends as well as newsletters and journals to its members.

This organization is an invaluable asset for current and future laboratory leaders.

First Ohio-CLMA Leadership can be found at [http://www.clma.org/group/FOC](http://www.clma.org/group/FOC)
Western Lake Erie-CLMA Leadership found at [http://www.clma.org/group/WLEC](http://www.clma.org/group/WLEC)
Six Rivers-CLMA Leadership can be found at [http://www.clma.org/group/SRC](http://www.clma.org/group/SRC)
General Information

Register Early

Online registration: Visit our website at: http://www.cventcom/d/d4q

If you are planning to attend the conference, you are strongly encouraged to register before the April 25 postmark deadline in order to take advantage of the lower early registration fees. After April 25, all registrants must pay the regular/onsite fees. Please see the complete instructions for registration adjacent to the registration form for more information.

Conference Registration

On-site registration and registration check-in will be held at the Crowne Plaza Columbus North during the following days and times:

- **Wednesday, May 7**  12:30 pm – 5:00 pm
- **Thursday, May 8**  8:00 am – 5:30 pm
- **Friday, May 9**  7:30 am – 3:30 pm

Continental Breakfast

Plan to join your colleagues at the complimentary Continental Breakfast on Thursday and Friday mornings from 8:00 am - 8:30 am.

Name Badges

A name badge must be worn by all conference attendees for admission to all sessions, the Student Academic Challenge, and all breaks and food/social functions.

Continuing Education Credits

ASCLS-Ohio is an approved provider of continuing education programs by the American Society for Clinical Laboratory Science (ASCLS) P.A.C.E.® Program. This conference offers a wide range of educational opportunities to meet your continuing education requirements. A “Certificate of Attendance” will be validated for all sessions attended.

Special Events

Join Us for a Greet, Eat and Meet Night

**Wednesday, May 7**  5:00 pm – 7:00 pm

The 2014 Ohio Collaborative Laboratory Conference steering committee, co-chairs, and all members invite you to a social event to kick off this special conference. This year the Wednesday night dinner will be included with all full registrations. This is an opportunity to catch up with friends and colleagues, make new ones, and relax before the conference swings into full gear on Thursday. **Please be sure to check the Wednesday dinner option on your registration to join us. A ticket will be included in your registration packet.**

Social Event- Fun at the Lanes

**Thursday, May 8**  9:00 pm

Join us Thursday after the vendor reception for the first social event outside of the CLC conference. We will be going to the Columbus Square Bowling Palace at 9:00 pm for a night of bowling. Meet members of the sponsoring organizations and delve into the opportunities of the profession while kicking back with some gutter balls and friendly banter. The cost will be $4.00/person/game. This price includes shoe rental. Shuttle vans will start leaving at 8:30.

Student Academic Challenge

**Friday, May 9**  2:30 – 5:00 pm

The ASCLS Academic Challenge committee is looking for excited, enthusiastic MLT/MLS students to join in participating in the 11th annual Academic Challenge. (AKA: Student Bowl). To organize your team you will need three members and one or two alternates. Team members must be registered participants for the meeting in order to qualify being on a team.

As last year’s winner, University of Cincinnati will be defending their title at the competition this year. The deadline for registering your team is rapidly approaching, so get your team organized, and come join students from all around the state for an afternoon of educational FUN!

Charity Opportunity-School Supply Drive

**All days at Registration area**

School supplies and donations received will go to Neighborhood Services, Inc. This organization provides assistance to low income families in the Columbus area. Supplies needed include pens, pencils up to and including backpacks. These supplies help underprivileged children with the supplies they need to get a good education.
The 2014 Ohio Collaborative Laboratory Conference will have many vendors present again, to show us what’s new in our field. There will be demonstration vans parked outside with some of the latest Chemistry, Hematology and Immunoassay instruments. The exhibit hall will give you the opportunity to talk to numerous representatives from the different companies, so you can compare the pros and cons of different products and systems, all at the same time.

Each year these vendors help sponsor the Ohio Collaborative Laboratory Conference. They play a significant role in sponsoring speakers, breaks, and lunches, helping to make it possible for us to put on the caliber of conference we do each year. Please take time during the conference to visit with them, learn about new laboratory products, make great connections and thank them for their support. Vendors that we will be seeing as of printing of the brochure include:

- American Proficiency Inst.
- Beckman Coulter
- Cepheid
- Hettich Lab Technology
- Hologic/Gen-Probe
- Instrument Laboratory
- Meridian Bioscience
- Muskingum University
- Nanosphere
- Roche Diagnostics
- Siemens Medical Solutions Diagnostics
- And many others

Please see our website for updated vendor information.

We are looking forward to our annual Vendor Reception, where we can have a cocktail and appetizers with them and be able to do some serious networking.

The sponsoring organizations would like to thank you for your support.

Welcome to the 2014 Ohio Collaborative Laboratory Conference.
Accommodations & Directions

2014 Ohio CLC: An Exploration of Medical Laboratory Science

Guest rooms have been reserved at the Crowne Plaza for the nights of Tuesday May 6 to Thursday May 8 with a special rate of $93.00 per night, plus applicable taxes (king bed or double beds) for conference attendees. These group rates are available until April 15 or they run out of rooms so be sure and book early!

To book a room at the Crowne Plaza, call 1-614-885-1885 or visit the website: http://www.ihg.com/crowneplaza/hotels/us/en/reservation. When making your reservation, make sure to mention that you are attending the Ohio Collaborative Laboratory Conference (CLC) and note that the group code is LAB (group code must be used when making reservations).

Crowne Plaza North, Columbus
6500 Doubletree Ave
Columbus, Ohio 43229
(614) 885-1885

FROM CLEVELAND AND POINTS NORTH EAST:
Take I-71 South to Exit 117. Take the right and follow signs for OH-161. Turn right onto OH-710 North/ Busch Blvd. Turn right onto Kingsmill Parkway. Arrive at 6500 Doubletree Ave.

FROM CINCINNATI:
Take I-71 North toward Columbus. Take the ramp right for I-70 East/ I-71 North toward Wheeling. At Exit 101A take ramp left for I-71 North to Cleveland. At exit 117 take the right and follow signs for OH-161. Turn right onto OH-710 North/ Busch Blvd. Turn right onto Kingsmill Parkway. Arrive at 6500 Doubletree Ave.

FROM THE WEST:
Take I-70 East toward Columbus. Keep left onto I-670 East. At exit 5B take ramp left for I-71 North toward Cleveland. Keep left onto I-71 South. At exit 117 take the right and follow signs for OH-161. Turn left onto OH-161W/E Dublin Granville Rd. Turn right onto OH-710 North/ Busch Blvd. Turn right onto Kingsmill Parkway. Arrive at 6500 Doubletree Ave.
Registration Instructions

General Registration

Online registration and credit card payment. Check out the website at http://www.cvent.com/d/d4qmpy. The conference registration fee includes admission to scientific sessions, refreshment breaks, lunch, Wednesday dinner and the vendor sponsor tables. Please be sure to mark whether or not you plan to attend the Wednesday Dinner on your registration form. All meals require a ticket that will be provided in your onsite registration packet. It is very important to note on the registration form what sessions you expect to be attending to ensure adequate seating. Do not select more than one session scheduled at the same time. Some sessions will be limited to a maximum seating of 30 people.

Dietary / Special Accommodations

If you have any special needs, including dietary restrictions or vegetarian needs, please contact Laura Hook at mlt_laura@yahoo.com prior to the conference to ensure adequate time for a lunch to be prepared.

Attention: Members of AACC, ASCLS, CLMA

When completing the conference registration form, please check the appropriate member box(es) – and provide your member number for each. This will ensure that your status as a member of one (or more) of the collaboration organizations (AACC – Northeast Ohio Section, ASCLS-Ohio, CLMA–First Ohio, Six Rivers, or Western Lake Erie Chapter) is recognized and member registration fees will apply. Your current membership status in the organization(s) selected will be verified.

Institutional Registration

Badges may be purchased to enable several employees from an institution to attend selected sessions during the conference without each person needing to register for a single day. The price for an institutional badge is $265 for the first badge and $175 for each additional badge purchased by the early registration deadline. The badges may be transferred as desired to allow maximum participation. One lunch ticket will be provided on Thursday and Friday for each badge purchased. Please provide the name of a contact individual for any questions concerning the institutional registration and to obtain a listing of those individuals who will be using the badges and the sessions they will be attending. To assist with the scheduling of staff who will be attending the conference (and to submit with the registration form or via email), please contact Rosanne Kelley at rkelley@ccf.org to request an electronic copy of the “Institutional Badge Users Session Selection Worksheet”.

Sorry, no on-site registration is available for institutional badges.

Early Registration

Early registration MUST be entered online or if mailed, postmarked on or before April 25, 2014. After this date, the higher on-site fees apply.

Refund / Cancellation Policies

Full registration fees will be refunded only if a written request is postmarked on or before April 25, 2014. A session may be cancelled if there is insufficient interest from registrants.

Questions / Need More Information?

Melanie Giusti, Co-Chair: melanie.giusti@uc.edu                      Allen Nickels: nickelsa@summahealth.org
Dustin Bunch, Co-Chair: bunchd@ccf.org                            Shannon Kern: skern29@yahoo.com
Catherine Shaffner: catherine.shaffner@promedica.org               Jane Tester: Jane.L.Tester@questdiagnostics.com
Pam Kin: pamela_kin@mhsnr.org                                      Lisa Kubit: lkubit@clevelandheartlab.com
Registration Form

2014 Ohio Collaborative Laboratory Conference

You can also register online at: http://www.cvent.com/d/d4qmpy

Name _______________________________________

Institution _______________________________________

Mailing Address _______________________________________

City / State / Zip Code _______________________________________

Phone: (Day) _________________ (Evening) _________________

Email Address: _______________________________________

Are you a member of AACC, ASCLS, or CLMA? □ N □ Y

Are you a student? □ N □ Y

Membership: Check all that apply (include member #)

□ AACC, NEO-Member #

□ AACC, NEO-Student #

□ ASCLS-Ohio #

□ Professional #

□ Student #

□ CLMA-1st Ohio #

□ CLMA-WLE #

□ CLMA-Six Rivers #

Registration Fees:

<table>
<thead>
<tr>
<th>Registration (Wed, Thurs, Fri)</th>
<th>Postmark by April 25</th>
<th>After April 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$170.00</td>
<td>$220.00</td>
</tr>
<tr>
<td>Nonmember</td>
<td>$245.00</td>
<td>$295.00</td>
</tr>
<tr>
<td>Student Member</td>
<td>$70.00</td>
<td>$120.00</td>
</tr>
<tr>
<td>Student Nonmember</td>
<td>$100.00</td>
<td>$150.00</td>
</tr>
</tbody>
</table>

Institutional Badge  Please email ohioiclclc@gmail.com

Please let us know if you plan to attend the Wednesday Collaboration Dinner

☐ YES, I will attend  ☐ NO, I will not attend

Wed dinner included Full and Wednesday Only Registrations

<table>
<thead>
<tr>
<th>Wednesday Only</th>
<th>Postmark by April 25</th>
<th>After April 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>$75.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Nonmember</td>
<td>$105.00</td>
<td>$130.00</td>
</tr>
<tr>
<td>Student Member</td>
<td>$35.00</td>
<td>$60.00</td>
</tr>
<tr>
<td>Student Nonmember</td>
<td>$45.00</td>
<td>$70.00</td>
</tr>
</tbody>
</table>

Thursday only ☐ or Friday only ☐

(Please mark day(s) attending – fees are each day)

<table>
<thead>
<tr>
<th>Member</th>
<th>Postmark by April 25</th>
<th>After April 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>$90.00</td>
<td>$130.00</td>
<td>$ __________</td>
</tr>
<tr>
<td>$125.00</td>
<td>$165.00</td>
<td>$ __________</td>
</tr>
<tr>
<td>$35.00</td>
<td>$60.00</td>
<td>$ __________</td>
</tr>
<tr>
<td>$55.00</td>
<td>$80.00</td>
<td>$ __________</td>
</tr>
</tbody>
</table>

Please CIRCLE the sessions you plan to attend:

| Wednesday | | Thursday |
|-----------|-----------------------------------------------|
| W1 W2 W3 W4 W5 W6 W7 W8 W9 | T10 T11 T12 T13 T14 T15 T16 T17 T18 T19 |
|                           | T20 T21 T22 T23 T24 T25 T26 T27 T28 T29 |
|                           | F30 F31 F32 F33 F34 F35 F36 F37 F38 F39 |
|                           | F40 F41 F42 F43 F44 F45 F46 F47 F48 F49 |
| Academic Challenge        | ☐ Yes ☐ No |

TOTAL $ __________

Payment: by check ☐ by credit card ☐

Card: ☐ VISA ☐ Master Card ☐ Am Express

Card Number: __________________________

Expiration Date: ______________________

Mail Check payable to: ASCLS-Ohio – CLC 2014

c/o Catherine Shaffner
10204 N Shannon Hills Ln
Perrysburg, Ohio 43551-2691

Mail registration form and payment to:

ASCLS-Ohio – CLC 2014

c/o Catherine Shaffner
10204 N Shannon Hills Ln
Perrysburg, Ohio 43551-2691
PLEASE CIRCULATE