Registration is now open for the 41st Annual Symposium of the American Society of Crime Laboratory Directors being held at the Double Tree Resort by Hilton Hotel Paradise Valley, Scottsdale, Arizona.

The theme of this year’s symposium is “The Efficiency of Quality.” As crime lab management we are faced with lean budgets and an increased demand for our services. This "resource versus demand" issue presents a challenge for many of today’s crime laboratory leaders. With fewer resources, we must look for more efficient ways to maintain and improve quality, especially in light of new levels of scrutiny surrounding the crime laboratory. The symposium agenda contains entertaining speakers and a program of informative material that will motivate and enable our attendees to run their crime laboratories as they explore the efficiency of quality.

**Schedule of Events**

- **Saturday** May 3, 2014  
  ASCLD and ASCLD/LAB Board Meetings
- **Sunday** May 4, 2014  
  Workshops and ASCLD and ASCLD/LAB Board Meetings
- **Monday** May 5, 2014  
  Workshops and Board Meetings
- **Tuesday** May 6, 2014  
  Symposium Opening and Keynote
- **Wednesday** May 7, 2014  
  Symposium Plenary Session
- **Thursday** May 8, 2014  
  Presentations and Award Luncheon

In addition, a welcome reception will be held on Monday and a vendor sponsored outing is planned for Tuesday night for all symposium registrants.
## 2014 WORKSHOPS

### At A GLANCE

---

#### Sunday May 4, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday AM</td>
<td><em>How Can I Be Sure – Measurement Uncertainty Success Stories from the Trenches</em></td>
</tr>
<tr>
<td>Sunday AM</td>
<td><em>Human Factors for Improvement of Quality and Performance</em></td>
</tr>
<tr>
<td>Sunday PM</td>
<td><em>New Technologies and Solving Mixtures Genome-wide</em></td>
</tr>
<tr>
<td>Sunday PM</td>
<td><em>Emerging Drugs - Emerging Problems without Efficiency and Quality</em></td>
</tr>
<tr>
<td>Sunday PM</td>
<td><em>Implementation of Digital Evidence in an ASCLD/LAB Accredited Facility</em></td>
</tr>
</tbody>
</table>

#### Monday May 5, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday (All Day)</td>
<td><em>High Impact Hiring and Onboarding of New Forensic Scientists</em></td>
</tr>
<tr>
<td>Monday AM</td>
<td><em>Three Ugly Questions You Need to Answer for Your Lab</em></td>
</tr>
<tr>
<td>Monday AM</td>
<td><em>Emerging Drugs - Emerging Problems without Efficiency and Quality (repeat of Sunday workshop)</em></td>
</tr>
<tr>
<td>Monday PM</td>
<td><em>Implementation of Digital Evidence in an ASCLD/LAB Accredited Facility (repeat of Sunday workshop)</em></td>
</tr>
<tr>
<td>Monday PM</td>
<td><em>Latent Print Unit Management for the Non-Latent Print Examiner</em></td>
</tr>
<tr>
<td>Monday PM</td>
<td><em>Preventive Actions: A Risk Management Approach</em></td>
</tr>
</tbody>
</table>
HALF DAY WORKSHOPS-SUNDAY

How Can I Be Sure – Measurement Uncertainty Success Stories from the Trenches

Date: (AM) Sunday, May 4, 2014
Instructor: Laurel Farrell and Mary Jane Havener
Fee: $95.00 lunch included

Description: This workshop will detail the path taken by two ASCLD/LAB-International accredited laboratory systems. The Long and Winding Road (Beatles 1970) is a good characterization. The path wasn’t easy but it was worthwhile. Estimating measurement uncertainty does first require establishing measurement traceability and understanding your measurement process – possibly more time consuming than doing the measurement uncertainty calculations! If you don’t spend time on these steps you will find you have to walk backwards. You will hear the war stories, lessons learned and battles won from those that have done it. This workshop will provide a plan of attack for those that are just beginning the process to estimate measurement uncertainty and insight into how to keep moving forward When the Going Gets Tough (Billy Ocean 1986) for those that are mid-process or working to continually improve. Attendees will see how data on a measurement process can support current laboratory processes and decisions or promote and support changes in laboratory processes and decisions. Attendees will have an opportunity to hear how the ASCLD/LAB Policy on Measurement Uncertainty was written and why it includes what it does. Attendees will no longer have to say I Heard it Through the Grapevine (Marvin Gaye 1968). The workshop will include time for Question(s) (Moody Blues 1970) from the attendees looking for Answers (Susan Tedeschi 1998).

Human Factors for Improvement of Quality and Performance

Date: (AM) Sunday, May 4, 2014
Instructor: Richard Pinchin, Director, FKP, Stephen Burrows, Director, FKP, and Philip Haynes, Senior Training Associate, FKP
Fee: $95.00 lunch included

Description: The “Productive Crime Laboratory” (PCL) methodology has been developed specifically to assist the forensic and law enforcement community to maintain and improve service levels in times of financial restraint and challenging targets.
Written by forensic scientists for forensic scientists PCL is a lean based, top enabled, bottom up’ methodology that allows crime laboratory staff to implement a culture of continuous, sustainable, low cost change that puts the customer requirement at the focus.

The framework within PCL easily allows for the integration of previous and existing change programs ensuring all activity is directed toward achieving the stated goals, eliminating repetition and duplication of effort.

During this interactive workshop attendees will understand, through an action-learning approach, how “human factors” are a critical component of any scientific process. They will discover the richness of the content and experience how the Productive Crime Laboratory™ could be implemented in their own laboratory. The workshop will consist of a mixture of presentation, hands on demonstrations and interactive exercises.

The workshop is aimed at laboratory leaders, senior managers, customer focused professionals, operational managers, budget holders.

AFTERNOON SESSION

➢ New Technologies and Solving Mixtures Genome-wide

Date: (PM) Sunday, May 4, 2014
Instructors: Dr. Sandra Close
Fee: $95.00 lunch included

Description: This workshop will provide an understanding of advanced technologies with a focus on High Density SNP (HD-SNP) arrays. It will include validation data for HD-SNP arrays and comparisons to STR analysis and review case studies involving different types of evidence.
Lab Directors/managers will receive the latest information on advanced technologies and understand how they will fit into their arsenal of tools today and going forward. They will better understand the current status of the technologies and what has been completed in preparing the technologies for use in DNA forensic laboratories.
Forensic DNA analysis has been using STR loci for almost two decades. While STR analysis remains a viable and accurate technology, it has limitations with regard to the analysis of forensic samples that contain DNA from multiple sources. We will discuss and compare the advantages and disadvantages of using STR technology versus advance analysis techniques on various types of forensic evidence.
Toxicology Testing for the Non-Toxicologist-Maintaining Efficiency and Quality

Date: (PM) Sunday, May 4, 2014
Instructor: Ashraf Mozayani, Ph.D.
Fee: $95.00 lunch included

Description: Forensic laboratory administrators are facing monumental challenges. The political drive to reduce spending is resulting in less funding for laboratories, while the demands of the clients are increasing. Advances in technology are enabling forensic scientists to perform more analyses and more thorough investigations with increased speed and accuracy, but at a significant price. Courts are demanding better results, with the added criteria that the results be in compliance with the NAS Report of 2009, Daubert or other high court decisions. Inevitably this means that laboratories must attain accreditation, validate analyses, maintain an active QA/QC program and perform uncertainty determinations on all results. The demand on administrators is to be able to meet the demands of the clients, purchase new instrumentation and hire and train more personnel with increasingly limited funding.

This presentation will be directed towards laboratory administrators who have a limited understanding of forensic toxicology and the problems facing the toxicology laboratory. Hundreds of new drugs are becoming available on the streets (e.g., synthetic cannabinoids) and laboratories are expected to be able to detect them. We will present a discussion of the fundamentals of forensic analysis, the instrumentation used and how the analytical needs of the laboratory may require changes in the approach to forensic toxicology. Steps that can make the laboratory more efficient and functional on a reduced budget will be discussed.

Implementation of Digital Evidence in an ASCLD/LAB Accredited Facility

Date: (PM) Sunday, May 4, 2014
Instructor: Delia Heredia
Fee: $95.00 lunch included

Description: The need for Digital Evidence examinations has been increasing rapidly in forensic cases. The implementation of this discipline in an ASCLD/LAB accredited facility requires that the casework meet all the quality management system requirements of the facility. The California Department of Justice- Bureau of Forensic Services, Fresno Laboratory took on this task in 2011. This presentation will discuss how this task was approached including selecting the appropriate software for casework, validation and writing the technical procedures and training curriculum. The discussion will include any challenges along the way to successfully achieving accreditation as well as any current challenges encountered at present.
All Day Workshop - Monday

➢ High Impact Hiring and Onboarding of New Forensic Scientists

Date: Monday, May 5, 2014
Instructor: John Collins Jr. MA, SPHR
Fee: $150.00 lunch included

Description: High impact hiring and onboarding of new forensic scientists

It’s of the utmost importance. The manner in which organizations “onboard” new employees is the single most accurate predictor of how well employees will commit to the mission and values of their organizations. In the forensic science laboratory, new employees represent management’s best opportunity to produce the culture and reliability they need across the workforce. Unfortunately, the time spent with new employees and the effort made to properly onboard them in the first 6-months of employment is too-often substandard. This 8-hour seminar is taught by John Collins, longtime ASCLD member, speaker, writer, and certified Senior Professional in Human Resources. Attendees will learn the most common mistakes made by forensic science laboratories and the best-practices utilized in other organizations to build a committed, engaged workforce. After attending this seminar, you will be armed with new ideas and strategies, and you will be better prepared to evaluate your own selection, hiring, and onboarding practices for the purpose of proposing and implementing improvements.

Half Day Workshops - Monday

➢ Three Ugly Questions You Need to Answer for Your Lab

Date: (AM) Monday, May 5, 2014
Instructor: Max M Houck, Ph.D. and Paul Speaker, Ph.D.
Fee: $95.00 includes lunch

Description: Among the many questions a laboratory manager needs to ask about their laboratory, these three are possibly the most uncomfortable and difficult to answer:
What is your risk management plan?
What is the capacity of the laboratory, that is, how many cases can really be worked?
What does your laboratory cost?

Many, if not most, forensic laboratories do not have a formal risk management plan. A risk management plan is a document that is prepared to plan for risks, estimate effects, and define responses to issues. Risk is an inherent uncertainty that can have a positive or negative effect on a project's or organization's objectives. A risk management plan provides an analysis of likely risks, scales the impact of those risks, and offers mitigation strategies to offset or exploit the risk; these culminate in a risk strategy, which is critical to the project's or organization's success. Risk strategies cover the avoidance, mitigation, acceptance, and transfer of risks. Another level of risk management is at the case level (operational and tactical): Which samples should be tested, which not tested, and why. Scientists may be concerned that they have to 'test everything' because lawyers might ask about untested samples to score an easy point. Unnecessary testing has an impact on the economics of managing the laboratory casework.

The capacity of a laboratory is another difficult, but necessary, estimate to make for a laboratory. How many cases can a particular scientist, unit, section, or laboratory complete in a set timeframe? What is, in essence, "normal"? The question is not a purely academic one because it represents the core production function of the organization and forms the basis for many other estimates, including budgeting, staffing, grant funding, and quality.

The majority of forensic laboratories are public entities and are therefore exempt from making a profit. Money is therefore an input (from the budgeting process) but not an output; costs should predominate in the mind of the manager. Understanding fully-loaded costs of examinations, staff, consumables, and capital investments is critical to the financial health of a forensic laboratory; controlling those costs is vital to its survival.

This workshop will instruct participants on the basics of these three topics, how they affect the forensic organization, and how to answer the "three ugly questions" for their laboratory. The workshop will provide examples for the participants to work through but they are welcome to bring their own data to use in the workshop; data in the FORESIGHT format, using the Laboratory Reporting and Analysis Tool (LabRAT) would be helpful for consistency.
Toxicology Testing for the Non-Toxicologist-Maintaining Efficiency and Quality ***
(This is a repeat workshop from Sunday) ***

Date: (PM) Sunday, May 4, 2014
Instructor: Ashraf Mozayani, Ph.D.
Fee: $95.00 lunch included

Description: Forensic laboratory administrators are facing monumental challenges. The political drive to reduce spending is resulting in less funding for laboratories, while the demands of the clients are increasing. Advances in technology are enabling forensic scientists to perform more analyses and more thorough investigations with increased speed and accuracy, but at a significant price. Courts are demanding better results, with the added criteria that the results be in compliance with the NAS Report of 2009, Daubert or other high court decisions. Inevitably this means that laboratories must attain accreditation, validate analyses, maintain an active QA/QC program and perform uncertainty determinations on all results. The demand on administrators is to be able to meet the demands of the clients, purchase new instrumentation and hire and train more personnel with increasingly limited funding.

This presentation will be directed towards laboratory administrators who have a limited understanding of forensic toxicology and the problems facing the toxicology laboratory. Hundreds of new drugs are becoming available on the streets (e.g., synthetic cannabinoids) and laboratories are expected to be able to detect them. We will present a discussion of the fundamentals of forensic analysis, the instrumentation used and how the analytical needs of the laboratory may require changes in the approach to forensic toxicology. Steps that can make the laboratory more efficient and functional on a reduced budget will be discussed.

AFTERNOON SESSION

Implementation of Digital Evidence in an ASCLD/LAB Accredited Facility *** (This is a repeat workshop from Sunday) ***

Date: (PM) Sunday, May 4, 2014
Instructor: Delia Heredia
Fee: $95.00 lunch included

Description: The need for Digital Evidence examinations has been increasing rapidly in forensic cases. The implementation of this discipline in an ASCLD/LAB accredited facility requires that the casework meet all the quality management system requirements of the facility. The California Department of Justice- Bureau of Forensic Services, Fresno Laboratory took on this
task in 2011. This presentation will discuss how this task was approached including selecting the appropriate software for casework, validation and writing the technical procedures and training curriculum. The discussion will include any challenges along the way to successfully achieving accreditation as well as any current challenges encountered at present.

➢ **Latent Print Unit Management for the Non-Latent Print Examiner**

Date: (PM) Monday, May 5, 2014  
Instructor: Jon Byrd, MSFS  
Fee: $95.00 lunch included

**Description:** Management teams within crime laboratories are often faced with rapidly developing issues in their latent print units and are sometimes ill prepared to address them adequately due to their lack of practical experience in the field. This workshop is designed to equip the crime lab manager or quality manager with a general understanding of the best practices in the latent print community. It is also an opportunity to understand the current issues and challenges facing all of the impression evidence disciplines. Everything from selection and testing of applicants, training program requirements, proof of competency, productivity expectations, proficiency testing, conflict resolution, continuing educational needs, quality management methods and reporting will be included. Bring your worst scenarios to class and let’s hash them out in a safe workshop environment.

➢ **Preventive Actions: A Risk Management Approach**

Date: (PM) Monday, May 5, 2014  
Instructor: Chris Krug  
Fee: $95.00 lunch included

**Description:** The ISO/IEC 17025 standard specifies in section 4.12 that a laboratory must take proactive steps to identify potential sources of nonconformities. This can be a very challenging
task for a laboratory as we are so often being reactive to discovered nonconformities, rather than thinking ahead to potential issues. This workshop will present how taking a risk management approach to your laboratory’s operations can not only meet this requirement, but help your laboratory reduce the risk of nonconformities against your management system as well as other everyday business risks. Attendees will be presented with the basic theory as well as an outline of how risk management might be implemented in a laboratory. Practical exercises for each step will help attendees understand how the process might work.