PRESIDENT’S MESSAGE

Colleagues,

I’m very excited about the work that our historical committee has done over the past year and I can’t wait for you to see the display at the 2017 symposium that showcases the rich history of our organization. In case you missed it, Past-President Kevin Lothridge has headed up a team that has worked to catalog and digitize many historical documents and memorabilia from the earlier years of ASCLD. In addition to maintaining important historical documents for the benefit of future members and leaders of ASCLD, they are also creating a display to honor ASCLD’s history at the symposium.

To date, the historical committee has gone through boxes and boxes of material that has been stored at the ASCLD offices and sent in from members. The last box from the office was sent to Kevin last week.

That said – we are still looking for more material if you have it. If you happen to have old ASCLD documents and/or photos that you wouldn’t mind letting Kevin and his team digitize for posterity, we would greatly appreciate receiving it! If you have duplicate documents or memorabilia that you would be willing to donate to the historical display we would very much like to talk to you about that, too! We are looking for anything of historical significance including photos from previous symposia.

If you would like to contribute to this project or have questions about what we need, please contact Kevin at history@ascld.org.

Have a great week.

Kindest regards,

Jeremy Triplett

CALL FOR ABSTRACTS: NIST Forensic Science Error Management International Forensics Symposium

The Program Committee for the 2017 International Forensic Science Error Management Symposium, to be held July 24-28, 2017 in Gaithersburg, MD, invites abstract submissions. Scientists in academia, government, industry, practitioners, and others working in the field of forensic science are invited to share their experiences and their results dealing with error management.

For more information including focus areas, technical tracks, and abstract submission guidelines, please visit https://www.fbcinc.com/e/nistifs/callforabstracts.aspx.
Sponsorship and Exhibits

The ASCLD Symposium is an opportunity to meet the industry leading Crime Lab Directors from the United States and throughout the globe. We invite you to take the opportunity to participate in the Symposium through networking opportunities in exhibiting.

http://www.ascldsymposium.com/sponsors-exhibitors

Preview of Symposium Workshops and Key Note Speakers.....coming soon

Golf Tournament, May 1st, 2017

Stevens Park Golf Course –
1005 N Montclair Ave, Dallas, TX 75208

Join us for a round of golf with your colleagues and the symposium sponsors for a Best Ball tournament and a chance to win a prize! The shotgun start will be at 12:30pm, with a buffet lunch provided beforehand.

ASCLD will be assigning teams of 4 ahead of time to allow for networking and new opportunities to be presented for all participants.

You can sign up for the golf tournament through our registration system here.

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The registration cost of $80/person includes 18 holes of golf, cart fees and lunch. Golf clubs can be rented for an additional charge at the course. Transportation to and from the course is not included.

See you there!
Complex DNA mixtures from more than two individuals and/or profiles amplified with low-level quantities of DNA, can be challenging for the analyst to interpret. Dr. Coble first provided an overview of the technical issues with mixture interpretation including statistical analyses. Ms. Garcia described the lessons learned in Texas as the state confronted one of the forensic DNA community’s elephants in the room—that DNA mixture interpretation is challenging and laboratories have not always interpreted complex mixtures properly. Ms. Garcia described how Texas became aware of the issue, what the Texas Forensic Science Commission did in response and how stakeholders developed a plan to identify and notify potentially affected defendants in literally tens of thousands of cases. She discussed what Texas observed regarding the crucial role of SWGDAM and the accrediting bodies, where the gaps in oversight are and what work remains to be done through the OSAC process. Ms. Garcia made the case for review of DNA mixture cases by any laboratory that may not have applied statistical methods properly (in particular the Combined Probability of Inclusion/Exclusion) and warned against viewing probabilistic genotyping software as a blackbox savior in light of what Texas has already observed for mixture recalculation using the software.

ASCLD DNA Mixtures Webinar: Managers Overview – Archival - https://tinyurl.com/33c54z6m

ASCLD DNA Mixtures Webinar Series : Technical Overview

This webinar is targeted to DNA Technical Leaders, Quality Mangers, DNA Supervisors and DNA Analysts.

Presenters: Joel Sutton, the DNA Casework Technical Leader for the United States Army Criminal Investigation Laboratory, John Buckleton, Principal Scientist for the Institute of Environmental Science & Research Ltd in Auckland, New Zealand; Bruce Heidebrecht, DNA Technical Leader for the Biology Section at the Maryland State Police, Forensic Sciences Division and Jerilyn Conway, Federal Bureau of Investigations

Complex DNA mixtures from more than two individuals and/or profiles amplified with low-level quantities of DNA, can be challenging for the analyst to interpret. The FBI’s Scientific Working Group on DNA Analysis Methods (SWGDAM) has been crafting a new version of the autosomal DNA STR interpretation guidelines that most of the DNA laboratories in the country look to for guidance in analyzing DNA profiles. Mr. Sutton presented information on the changes to the interpretation Guidelines including the background and scope of the changes. Mr. Heidebrecht and Ms. Conway also answered questions and provided additional comments. Mr. Buckleton spoke about the PCAST report and the impact the report is having on the Forensic DNA community.

ASCLD DNA Mixtures Webinar: Technical Overview – Archival - https://tinyurl.com/33c54z6m


These research reports have been submitted by the National Institute of Justice (NIJ) especially for their relevance to crime laboratory activities. ASCLD has not reviewed nor does it necessarily endorse the findings of this research.

Funding Opportunity for Research and Development in Forensic Science for Criminal Justice Purposes

Marshall University Forensic Science is offering the DNA Technical Assistance Program (DNA TAP) again this year. Attached is the DNA TAP Information flyer and the associated DNA TAP Request Form should you have validation or evaluation needs. Beginning this week, a limited number of DNA TAP students are in training at the MU Forensic Science Center from now until May for their summer 2017 DNA TAP assignments. No assignments have been made at this time so please apply early this fall to have the best chance to be assigned a DNA TAP student.

Please feel free to call (304-634-5263) or email (staton1@marshall.edu) should you have questions or wish to apply but need more information. If you are new to this program, I would be happy to set up a conference call with your group to discuss this further.

Also, please feel free to forward this email and its attachments to a colleague.

Thank you,

Pam

Pamela J. Staton, Ph.D.
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Bode Cellmark Forensics provides advanced forensic solutions offering labs ways to reduce their workloads and budgets.

Bode’s newest offerings include:

Sexual Assault Kit Backlog Reduction Program

Bode Bucellat™ is uniquely designed to improve DNA databasing collection and automate processing. The Bode Bucellat 2 is a DIRECT COLLECTION SYSTEM that requires minimal training. There is NO Transfer Step Required.

Independent Validation Services are customized to meet your laboratory’s needs. Validation services provide completely unbiased analysis on your equipment, chemicals, or process.

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Independent Validation Services are customized to meet your laboratory’s needs. Validation services provide completely unbiased analysis on your equipment, chemicals, or process.
Funding Opportunity: Paul Coverdell Forensic Science Improvement Grants Program – Formula
NIU is seeking proposals for the Paul Coverdell Forensic Science Improvement Grants Program, which awards grants to states to help improve the quality and timeliness of forensic science and medical examiner/county coroner office services. Among other things, funds may be used to eliminate a backlog in the analysis of forensic evidence and to train and employ forensic laboratory personnel, as needed, to eliminate such a backlog. This funding opportunity is only for the formula (“base”) funds. Deadline: March 10, 2017. Learn more about this and other funding opportunities for crime labs in a webinar recording available soon.

Funding Opportunity: Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories
NIU is seeking proposals for research and evaluation studies that may: 1.) Identify and inform the forensic community of best practices through the evaluation of existing laboratory protocols; and 2.) Have a direct and immediate impact on laboratory efficiency and assist in making laboratory policy decisions. The intent of this program is to identify the most efficient, accurate, reliable, and cost-effective methods for the identification, analysis, and interpretation of physical evidence for criminal justice purposes. Deadline: February 27, 2017. Learn more about this and other funding opportunities for crime labs in a webinar recording available soon.

Funding Opportunity: Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement Program
Demands for forensic DNA analysis increased every year from 2009 to 2014, with a 28 percent increase in cases submitted to forensic DNA laboratories during that time period. Often, a single case submission includes requests for forensic analyses in DNA and non-DNA disciplines. Enhancing capacity and improving efficiency in the processing and testing of non-DNA evidence from cases that also involve a request for DNA analysis will ultimately reduce the backlog of DNA evidence. NIU’s Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement (E&CE) program is intended to help address that gap. Deadline: March 13, 2017. Learn more about this and other funding opportunities for crime labs in a webinar recording available soon.

Funding Opportunity: DNA Capacity Enhancement and Backlog Reduction (CEBR) Program
The goal of NIU’s FY 2017 DNA Capacity Enhancement and Backlog Reduction (CEBR) program is to assist eligible states and units of local government to process, record, screen, and analyze forensic DNA and/or DNA database samples and to increase the capacity of public forensic DNA and DNA database laboratories. Under this program, in general, eligible applicants are given the opportunity to determine what portion of their anticipated funding should be used for capacity building and what portion should be used for analysis of forensic DNA or DNA database samples. Deadline: March 13, 2017. Learn more about this and other funding opportunities for crime labs in a webinar recording available soon.

Funding Opportunity: Strengthening the Medical Examiner-Coroner System Program
Death investigations performed by medical examiners or coroner (ME/C) offices are vital to criminal justice. Of the 2.6 million deaths annually, ME/C offices investigate nearly 500,000 cases in approximately 2,400 jurisdictions, but many communities lack adequate personnel, infrastructure, and resources to address medical/legal death investigation (MDI) needs. NIU’s Strengthening the Medical Examiner-Coroner System Program is a competitive program designed to enhance MDI services and improve the supply of forensic pathologists nationwide by supporting forensic pathology fellowships as well as ME/C office accreditation. Deadline: March 20, 2017. Adapting Newborn Blood Testing Procedures to Forensic Toxicology

Featured Article:
His name was Wilmer Souder, a physicist at the National Bureau of Standards, now known as the National Institute of Standards and Technology (NIST), Souder played an important role in the early days of forensic science. He helped send countless murderers, bootleggers, gangsters and thieves to prison, and he kept such a low profile partly out of concern for his and his family’s safety. Perhaps as a result, he was not long remembered for his forensic work, and his influence on the developing field of forensic science was not as great as it might have been.

NIST Library just finished scanning Souder’s nine notebooks and has made them available for anyone to view via the NIST Digital Archives. https://nisti.digitalarchives.contentdm.oclc.org/cdm/landingpage/collection/p16009coll67

Bringing together experts from the forensic, research, legal, and law enforcement communities to strengthen forensic science and create a safer, more just society.

Welcome to the National Software Reference Library (NSRL) Project Web Site.
A recent article on NU.gov describes a procedure known as dried blood spot (DBS) testing that can be used in forensic toxicology examinations and would benefit both forensic laboratories and the judicial system. The researchers examined dried blood spots for evidence of 28 drugs and metabolites. The specific goal of their work was to determine if DBS analysis could produce results comparable to traditional drug analysis and, when combined with mass spectrometry, be sensitive enough for quantification of “drugs of abuse” typically encountered in forensic labs.

Degraded Ignitable Liquids Database: An Applied Study
Identification of ignitable liquid residues in fire debris is complicated by weathering that causes the loss of ignitable liquid components and the presence of microbes that alter the residue’s composition. In this NU-supported project, researchers from the University of Central Florida analyzed the effects of weathering and biological degradation on 50 different ignitable liquids taken from each of the ATSM E1618 designated classes and selected from the Ignitable Liquids Reference Collection (ILRC). The results of this project led to an upgrade of the ILRC Database and provided fire debris analysts with hundreds of examples of weathered and biologically degraded ignitable liquid samples.

Statistical Methods for Combining Multivariate and Categorical Data in Postmortem Interval Estimation
Inferring the time since death is routine in death investigations, but basing such post-mortem interval (PMI) numbers on the developmental stages of maggots and other insects is less than straightforward. The biological clock provide by insect appearance and growth in a dead body comes with a great deal of uncertainty because the sizes and succession combinations of insects differ even when observed under identical conditions. Researchers at the Louisiana State University Health Sciences Center, working with NU support, developed a statistical method using inverse prediction to assess the time since death with a reasonable confidence level, most commonly set at 95 percent. The research demonstrated the value of inverse prediction in forensically important settings and how it can be performed with programs in widely available statistical computing packages.

Citrate Content of Bone: A potential Measure of Post Mortem Interval
A constant concern for forensic practitioners is the determination of the post-mortem interval (PMI) in questioned death cases. A number of methods have been tried to better determine PMI, but all have proven problematic. NU-supported researchers at the SUNY College of Agriculture and Life Sciences at Brockport evaluated the citrate method for determining PMI based on a 2010 study that indicated citrate content in bone could be potentially useful in estimating PMI. The researchers, with the College at Brockport, SUNY, analyzed more than 30 human bone samples and determined that the “theoretical correlation between citrate content of bone and PMI is much weaker than reported [in the earlier study].” They also tested porcine bone samples, but in the end concluded that, “citrate is not a reliable and validated method for determining PMI in bone.” Evaluation of Osteometric Measurements in Forensic Anthropology
Emphasizing the accuracy of collecting data and improving error rates for forensic anthropologists working with skeletons, NU-supported researchers from Lincoln Memorial University had four “observers” with different experience levels measure elements of 50 skeletons. The error data resulting from the measurements was used to determine the efficacy of commonly used skeletal measurements and to evaluate alternatives for problem measurements.

Graphical User Interface for a Multi-Factorial Age-At-Death Estimation Method Using Fuzzy Integrals
Most forensic anthropologists develop their own guidelines, typically based on past experience, for combining multiple indicators to determine an individual’s age-at-death based on a skeleton. Researchers in this NU-supported project note that such results are not standardized or reproducible. To address this problem the researchers, from Texas State University, developed a graphical user interface (GUI) with algorithms based on “fuzzy integrals” that provide forensic

This project is supported by the U.S. Department of Homeland Security, federal, state, and local law enforcement, and the National Institute of Standards and Technology (NIST) to promote efficient and effective use of computer technology in the investigation of crimes involving computers. Numerous other sponsoring organizations from law enforcement, government, and industry are providing resources to accomplish these goals, in particular the FBI who provided the major impetus for creating the NSRL out of their ACES program.

The National Software Reference Library (NSRL) is designed to collect software from various sources and incorporate file profiles computed from this software into a Reference Data Set (RDS) of information. The RDS can be used by law enforcement, government, and industry organizations to review files on a computer by matching file profiles in the RDS. This will help alleviate much of the effort involved in determining which files are important as evidence on computers or file systems that have been seized as part of criminal investigations.

scientists with a multifactorial age-at-death estimation, confidence in the estimation, informative graphs, and a standardized, reproducible method for age-at-death estimations. The researchers intend to make the interface available online.

Microspectrophotometry of Fibers: Advances in Analysis and Interpretation

Microspectrophotometry is a standard forensic laboratory technique for the comparison of fibers, however, there are concerns about its discriminating power and significance in a field that is moving toward statistical interpretation of data. In this NUI-supported project, researchers with the forensic laboratory MicroTrace conducted an extensive review of microspectrophotometry to present investigators with a context for relating spectral differences to colorant concentrations in fibers and illustrate cases in which similar, but different, fiber populations could not be discriminated.

Massively Parallel Sequencing: Application to Forensics

Massively parallel sequencing (MPS), also called next-generation sequencing, is an exciting technology that holds promise for enhancing the capabilities of forensic DNA laboratories. However, several challenges confront the implementation of an MPS system in a crime laboratory. This report, by NUI’s Forensic Technology Center of Excellence (FTCoE), provides forensic DNA scientists with a comprehensive resource on the fundamentals of current platforms and chemistries and summarizes a series of MPS-related webinars hosted by the FTCoE in conjunction with the University of North Texas Health Science Center’s Institute of Applied Genetics.

Examining the Effects of Environmental Degradation on the Optical Properties of Manufactured Fibers of Natural Origin

Synthetic fibers derived from naturally derived biological polymers are used in textiles and clothing. With the production of these manufactured fibers of natural origin (MFNOs) increasing in recent years, they are likely to become more common in regular case work in the forensic science laboratory. However, little is known about the changes occurring in their optical and physical properties as a result of exposure to moisture, sunlight, and various temperatures. This NUI-supported study investigated the effects of such degradation on three types of MFNOs. The results indicate that forensic fiber comparison can be conducted on such fibers exposed to different environments, while highlighting possible explanations for some observed morphological differences.

Transition Metal Cluster Compounds for the Fluorescent Identification and Trace Detection of Substances of Abuse

This NUI-funded research project focused on fluorescent indicators for substances of abuse with enhanced specificities. These new fluorescent indicators are based on d10 metal complexes and allow greater detection sensitivity and flexibility. The indicators are shelf stable and low cost, and the complexes formed can be stored for long periods without loss of fluorescence. Combining new sources, fluorescent indicators, and digitizing systems will produce systems capable of positively identifying compounds rapidly both in the field and in the lab. Ultimately, the procedure will be implemented in a hand-held system that will allow assessment of multiple indicators in the field.

Establishment of an Office of Forensic Sciences and a Forensic Science Board Within the Department of Justice

Revision 2/14/17


Formed in 2000, CFSO is an association of six forensic science professional organizations: American Academy of Forensic Sciences; American Society of Crime Lab Directors; International Association for Identification; International Association of Forensic Nurses; National Association of Medical Examiners; and Society of Forensic Toxicologists - American Board of Forensic Toxicology.

These professional organizations together represent more than 21,000 forensic science professionals across the United States.

The mission of the CFSO is to speak with a single forensic science voice in matters of mutual interest to its member organizations, to influence public policy at the national level and to make a compelling case for greater federal funding for public crime laboratories and medical examiner offices. The primary focus of the CFSO is local, state and national policymakers, as well as the United States Congress.


Forensic Crime Lab Strategic Business Plan

We develop and write Strategic Business Plans for forensic crime labs. Here are the type of questions and challenges we can help answer and overcome:

- Multiple Crime Lab Consolidation
- Medical Examiner Office and Crime Lab Mergers
- Multi Agency Regional Partnerships
- New Lab Considerations
- Equipment Planning
- Operational Cost Planning
- Workload Measurement
- Staff Planning
- New Equipment Forecasting and Funding Justification
- Operational Cost Forecasting
- Long Term Budget Forecasting

We can, together, develop a Forensic Crime Lab Strategy Plan that will make your lab more efficient, work within your operational budget, and deliver flawless work.


American Board of Forensic Toxicology

“Excellence through leadership in forensic science management”

http://www.ascld.org/about-us/our-history/