ASCLD
Forensic Research Committee
Bulletin

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"Do not go where the path may lead, go instead where there is no path and leave a trail"

-Ralph Waldo Emerson

Dear Forensic Community,

The members of the ASCLD Forensic Research Committee (FRC) are pleased announce the inaugural FRC bulletin. This bulletin is specifically designed to inform you of the progress of our mission which is to advance the core science of forensics by closing technology gaps and enabling future forensic technologies through strategic goals.

Strategic Goals: Identify RDT&E needs, foster collaboration, and support the development of enduring future forensic capabilities.

FRC HOT TOPICS

"Be the change you see in the world"

-Gandhi

LEAP Partnership Spotlight…

Idaho State Police Forensic Service And Idaho State University

The collaboration between the Idaho State Police Forensic Service and Idaho State University focuses on firearms serial number restoration. The use of a non-destructive technique to enhance visualizations prior to using destructive testing methods is currently under investigation. The university is focusing on the research with the laboratory providing technical support and guidance.

To date, the examination process is showing great potential. This successful partnership is supported with NIJ funds. For more information about the project or partnership, please contact ASCLD Board of Director Matthew Gamette. ♦

LEAP continues to expand! We are now up to 90 participating LEAP Labs and Universities. The more people that sign-up the more opportunities to collaborate. Please encourage your colleagues to consider this valuable opportunity! (https://www.ascld.org/forensic-research-committee/)

Learn more about the benefits of LEAP here: https://www.youtube.com/watch?time_continue=5&v=sCo_0P3zbaE&feature=emb_logo

The FRC Bulletin is designed to highlight developments within these core priorities. The status of the LEAP project is featured in this issue. You are encouraged to submit any comments regarding this bulletin to ASCLDFRC@gmail.com

Core FRC Priorities

Fostering the development of collaborative relationships between forensic science labs and academia.

Laboratories & Educators Alliance Program (LEAP)

Objective: The objective of the Laboratories and Educators Alliance Program (LEAP) is to facilitate collaborative research between academia and forensic science laboratories. This joint effort between the American Society of Crime Lab Directors (ASCLD) and the Council of Forensic Science Educators (COFSE) identifies forensic science needs and provides a platform for laboratories, researchers, and students to seek projects aligning with their mutual research capabilities.

Status: 90 LEAP Participating Labs and Universities (as of January 2019)

23 Forensic Science Labs

67 Universities

Outreach efforts will now be taking place to socialize LEAP which is anticipated to increase the number of participating labs and universities.

Goal: To grow the number of LEAP participating labs to 150 by March 2020.

Evaluation and Validation Tracking

Objective: Provide a centralized location to share information that may be useful to the broader community of forensic practitioners. This will include timely evaluations of new tools or technology that labs are curious about, as well as recent validations of new tools or technology that can serve as a blueprint for labs to avoid reinventing an entire experimental design.

Status: The website collector is now live! Please submit your new and exciting evaluations and validations!

Goal: To have at least 20 evaluations or validations of new technology available on the website by the end of 2020.

Implementation Team

Objective: to promote and facilitate interlaboratory collaboration related to RTD&E and validation efforts to strengthen the foundations and facilitate the transitions of new technologies & capabilities into mainstream forensic science practice.

Status: Working to solicit input from forensic science laboratories regarding potential or planned implementation efforts related to standards, practices, and methods as well their challenges, capabilities, and strategies for implementation.

Near-term – develop a survey and solicit input from ASCLD membership related to (i) the adoption and implementation of standards, practices, and methods currently on the OSAC Approved Registry and (ii) challenges and needs of the forensic science community that are barriers to implementation.

Identify laboratories willing to share information or materials to assist other laboratories with similar

Future Forensics

Objective: to identify new and emerging needs and pain points within forensic science practice and to identify research, processes, technology and tools with potential to address the new and emerging needs.

Status: The subcommittee was formed in June 2019.

Near-term - Circulate the INTERPOL research reviews (last 9 years) to the subcommittee.

Identify emerging techniques and opportunities in applications.

Coordinate with FLNTWG white paper reviews to identify the top 5 emerging technologies.

Publish an executive summary of the findings from the INTERPOL review and FLNTWG white papers for the benefit of the ASCLD membership.

Goal: To develop the infrastructure within the ASCLD FRC to facilitate rapid communications between the

implementation efforts.

Identify appropriate infrastructure for hosting the data and make accessible to ASCLD membership to facilitate inter-laboratory collaboration.

Long-term – identify options to facilitate sharing and access to sample validation plans, test samples, operational procedures, training materials, and other resources related to implementation of standards, practices, or methods.

Goal: To provide a central location for ASCLD members to identify, connect, and coordinate with other laboratories conducting research, development, testing, evaluation (RDT&E) and validation activities related to the implementation of new methods and technologies.

ASCLD membership regarding current and future needs in the forensic science enterprise.

The subcommittee will take the initiative to engage the ASCLD membership through outreach efforts to identify current and emerging problems that impact them, and will also review relevant literature to help identify the future of forensic science practice using a "technology roadmap".

Innovation Award

Objective: To acknowledge operational scientists who incorporate cutting-edge techniques to the practice of forensic science, and call attention to their work.

Status: The award documents have been finalized. The award application window will be open from December 13, 2019 to January 17, 2020. We are planning to advertise the award with the help of ASCLD and the FRC websites, in the AAFS newsletter, and by the FTCoE. The Award Committee of the FRC will evaluate the applications and establish committees as necessary to meet the demand.

Goal: To recognize activities highlighting new technologies, protocols, or tools that impact the operational forensic science laboratory. The final award decision will be made by March 1, 2020, and the winner will be recognized during the April 1st evening session of the 2020 ASCLD Annual Symposium.

FRC Outreach
Meet with the FRC at the AAFS in 2020!

Registered to attend the AAFS in Anaheim, CA next year?

The ASCLD Forensic Research Committee invites to you stop by our table to hear more about the LEAP program, the newly established FRC partnerships, and a few details about this year's goals and objectives. Table hours are from February 18, 2020 between 5:00 pm and 9:00 pm and February 19, 2020 anytime between 8:00 am and 8:00 pm.

 We look forward to meeting you there!

Sincerely, Ashraf Mozayani
Ashraf.Mozayani@tsu.edu

Meet the FRC Committee!

Henry Maynard - Chair
Cecelia Crouse (Outreach)
Lisa Yoshida (Evaluation/Validation Tracking)
Ashley Hall (Research Innovation Award)
Ashraf Mozayani
Jose Almirall (Future Forensics)
Jeremy Triplett
Nicole Jones
Bruce Hoolihan
Tracy Dawson Cruz
Henry Swofford (Implementation)
Jeff Comparin
(**New Task Groups in Green)**

Looking for the 2019 – 2020 research priorties?

American Society of Crime Laboratory Director's Research Priorities 2019-2021

Research Area
Practical statistical approaches for the interpretation of forensic evidence
Development and validation of standardized forensic methods and conclusions in Impressions, Patterns, and Trace Evidence disciplines
Assessment of Examiners' Toolmark Categorization Accuracy (Firearms/Toolmarks)
Research to establish validated methods for THC quantity in plant materials, edibles, extracts, etc. that also accounts for the moisture content of the plant
Error Rates in Qualitative Methods of Analysis for Controlled Substances
The ability to detect and locate sufficient biological material (e.g., epithelial cells, extracellular DNA, etc.) associated with touched or worn objects, that is not visible to the eye or with alternate light sources, for downstream DNA analysis
Examiner Reliability Study: Black and White Box Studies on Bloodstain Pattern Analysis
Error rate studies on qualitative analysis (single tests and schemes) in Controlled Substances. The conclusion of such a study will also explain its limitations
Characterizing, Designing and Constructing Integrated DNA Mixture Interpretation Solutions
Expert System for Forensic Evidence Analysis (including mixtures) in DNA
Development of an Integrated and Multidisciplinary Approach for the Advancement of Data Collection, Data Management and Data Analysis to Aid Interpretation of Trace Evidence
Validation of Conclusion Scale in Forensic Document Examination
Comprehensive GSR Persistence Study
Specific Identification of Shooters via GSR
Evaluation into the Validity of Facial Comparison Training Methods (Facial Identification)

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