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ASCLD

Forensic Research Committee Bulletin

If you look at history, innovation doesn't come just from giving people incentives; it comes from creating environments where their ideas can connect.

Steven Johnson

Dear Forensic Community,

Welcome to Issue 2 of the Forensic Research Committee Bulletin. In this Issue, the FRC will highlight the status from all task areas with the latest news. LEAP is a high priority with the FRC this year. Visit https://www.youtube.com/watch?v=syvgkXaQhaM&feature=youtu.be to see LEAP in action! Interested in signing up, email ASCLDFRC@gmail.com or visit https://www.ascld.org/forensic-research-committee/ and download the request form.

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



FRC HOT TOPICS

Have you registered for alerts from Science Direct?



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Receive the latest news on scientific, technical and medical research on ScienceDirect.

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Once you sign up, you will receive personalized recommendations based on your preferences and recent viewing history. Notifications will include a link to the article and whether or not it is open access.

With the new agreement between Elsevier and ASCLD, members may access articles for free or for a reduced membership fee.

Here is an example of what you can expect:

Hello, here are personalized recommendations based on your latest signed in ScienceDirect activity.

Part 1:- quality assurance mechanisms for digital forensic investigations: Introducing the Verification of Digital Evidence (VODE) framework

Open Access - Research article

Forensic Science International: Reports, Volume 2, October 2019, Article Number 100038

Graeme Horsman

Just click on the link shown in the email to access the article!

https://www.sciencedirect.com/science/article/pii/S2665910719300386?dgcid=raven_sd_recommender email

The Forensic Research Committee Newsletter | Volume 1: Issue 2

FORENSIC RESEARCH COMMITTEE

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: 93 LEAP Participating Labs and Universities (as of February 2020)

24 Forensic Science Labs 69 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 to help labs avoid reinventing an entire experimental design.

Status: The website collector is now live! https://www.ascld.org/validation-evaluation-repository/ Please submit your new and exciting evaluations and validations! FRC STRATEGY: This cultivated repository is designed to catalog the outstanding work of experts in the field and share these results with the forensic science community. ASCLD is excited about creating an environment to foster communication and reduce unnecessary repetition of validations which will benefit the practitioners working in the laboratory and the field.

If you find a validation or research project that you would like more information about, simply use the contact information provided to request a copy or chat with the experts who did the work.

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 – a survey is being distributed to solicit input from ASCLD membership related to (i) the adoption and implementation of standards, practices, and methods

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.

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

implementation efforts.

Identify appropriate infrastructure for hosting the data and make accessible to ASCLD membership to facilitate interlaboratory 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.

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 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 web sites, 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 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 Missed the FRC table at the AAFS?

The ASCLD Forensic Research Committee invites to you learn more about the LEAP program, the newly established FRC partnerships, and a few details about this year's goals and objectives.

If you missed the FRC table at the AAFS symposium, visit https://www.ascld.org/forensic-research-committee/ for more information about the FRC mission and 2019-2020 research priorities.

We look forward connecting soon!

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)

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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)

Task Group	Point of Contact	for more inforn	nation.	