



Maryland State Police Forensic Sciences Division (MSP-FSD) August 2015 Newsletter

These brief updates are being forwarded to your office in order to provide information about the forensic services offered by MSP-FSD, the implementation of new programs, and upcoming technologies. The summaries will supply you with contacts for additional information. Our staff is always available to speak with you or come to your office to provide presentations. For Customer Satisfaction Surveys, Submission of Evidence Guidelines, and other information visit our [new](#) webpage at:

<http://mdsp.maryland.gov/Organization/Pages/CriminalInvestigationBureau/ForensicSciencesDivision.aspx>

Director's Message: Hello, my name is Dan Katz and I am the Director of the Forensic Sciences Division of the Maryland State Police. Since our last newsletter in 2014, Dr. Wanda Kuperus, our Quality Assurance/Safety Manager for the previous five years was named as the new Deputy Director of MSP-FSD. Also, Theresa DeAngelo, previously the Coordinator for the Maryland Forensic Laboratory Licensing Program, was named as the new Quality Assurance/Safety Manager at MSP-FSD. There is clearly a focus on Quality Assurance at our laboratory and we are looking forward to October when we seek re-accreditation by our accrediting body, the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB). As stories about problems in forensic science continue to emerge across the nation, I feel it is critical to reassure our customers that MSP-FSD is constantly evaluating and improving our Quality Assurance system. Furthermore, we strive to be proactive whenever issues do arise and promptly address any potential impact on our customers. A recent example of our commitment to quality was in April when we hosted an ASCLD/LAB assessor training course for 24 forensic scientists (12 from MPS-FSD). This training provided a comprehensive review of the ISO 17025 accreditation standards and the ASCLD/LAB supplemental requirements for the accreditation of forensic science testing laboratories. At the conclusion of the training all participants took and passed a test and are now eligible to be ASCLD/LAB assessors. After this training, we now have qualified assessors in every unit of MSP-FSD. Not only does this give back to the forensic community but it also reinforces quality principles to our staff.

Biology Section: On May 8, 2015 the forensic community was informed by the FBI of errors in the original statistical databases from 1999 that are still in use today. Within four days of the corrected information being distributed to the forensic community, the Biology Section had reviewed the information and performed multiple comparisons of the original and amended statistical frequencies. The MSP-FSD has come to the conclusion that the amendments provided by the FBI to the allele frequencies provide minimal impact on the final statistical calculations that are already known to be estimates of the rarity of the DNA profile. Therefore, MSP-FSD will not be routinely recalculating previously reported statistics; however, we will do so at the request of the prosecution or defense. All statistical tools used by the MDSP-FSD that are affected by this amendment have been updated accordingly. Also in May, MSP-FSD forwarded information to detectives at a law enforcement agency in Maryland that the 4,000th DNA hit resulting from the Maryland DNA database was connected to an open felony crime they were investigating. MSP-FSD had just reported the 3,500th hit less than 1 year ago! In April, the Biology Section received a very favorable NDIS assessment report. NDIS Assessments are required and are conducted by the FBI. This was an intense 3 day assessment focused on the CODIS operations. According to the assessment team, of the 70 labs assessed since 2008, MSP-FSD's CODIS operations ranked as 1 of the top 3 they had seen! Inquiries regarding Biology can be directed to Section Manager, Argi Magers, at 443-357-1411 or at argiro.magers@maryland.gov.

Trace Evidence / Questioned Documents: The Trace Evidence section is proud to announce that there is currently no backlog of Fire Debris cases allowing cases to be analyzed as they are received. Fiber Analysis and Questioned Documents training of additional staff is currently underway as MSP-FSD currently has only one examiner in each of these areas. The Fiber Analysis training will be completed before the end of 2015. The Questioned Documents should be completed in 2016. Inquiries regarding Trace Evidence or Questioned Documents can be directed to Trace Evidence Section Supervisor, Joe Harant, at 443-357-1393 or at joseph.harant@maryland.gov.

Crime Scene Section: All Crime Scene Technician requests need to be made through the Maryland State Police Headquarters Duty Officer in Pikesville at 410-653-4200. Services are available to all Maryland law enforcement agencies twenty-four hours a day, seven days a week. Responsibilities of the requesting police agency include 1) deem the crime scene secure and safe, 2) obtain a search warrant, 3) do not touch any evidence, and 4) accompany the crime scene technician at all times. Inquiries regarding Crime Scene can be directed to Section Manager, Mitchell Dinterman, at 443-357-1541 or at mitchell.dinterman@maryland.gov.

Controlled Dangerous Substance: The decriminalization of marijuana, effective October 1, 2014, has reduced the submissions of cases significantly at the Berlin, Hagerstown, and Pikesville CDS Units. The Units are now focused on reducing backlogs and turn-around times for cases. The Units have seen an increase in heroin submissions, as well as synthetic drugs sold as bath salts and synthetic marijuana. These new drugs require more time and resources to analyze, and many are not currently controlled. The CDS Units are also transitioning to using STARLIMS for case analysis and reporting, which will change the format of the Lab report. It is anticipated that using Starlims for case analysis and reporting will allow the Units to go paperless, and to provide reports electronically to the customers. Inquiries regarding Controlled Dangerous Substances can be directed to Section Manager, Amber Teves, at 443-357-1391 or at amber.teves@maryland.gov.

Toxicology: The Toxicology Unit has been handling an increase in casework while short-staffed this year. The Unit is in the process of hiring an additional chemist, and is hoping to hire a second chemist, which will help with backlog reduction and turn-around time. The addition of a LC/MS/MS instrument to the Unit will also help to increase efficiency and reduce the backlog once the instrument has been validated. The LC/MS/MS will provide increased sensitivity, shorter analysis times, simplified sample preparation, and allow for more drugs to be tested for in a single instrument run. These benefits will be welcome as the decriminalization of marijuana has the potential to significantly impact the Toxicology Unit's caseload due to an increase in the number of individuals driving under the influence of marijuana. Once fully staffed, the Unit is looking forward to exploring the testing capabilities of the new technology. Inquiries regarding Toxicology can be directed to Section Manager, Amber Teves, at 443-357-1391 or at amber.teves@maryland.gov.

Latent Print/ Impressions: Following the loss of some key personnel, the Latent Print/Impressions Unit was challenged to meet the needs of our customers. Today we can announce that a backlog of nearly 1600 cases has been eliminated, and far more timely reports are once again the norm. Several operational policies implemented to streamline case-work in order to address the problem were found to be effective time saving measures. Included in these was the screening of cases which would not lead to a prosecution, or where constructive possession of the evidence already existed. Also, shoe and tire track exams are typically limited to cases with an absence of other pending forensic examinations, and latent print comparisons can be limited once an individual has been identified. These policy changes have proved to be very effective, without negatively impacting investigations or prosecutions, and have been adopted as standard operational policy. After many years of planning, a satellite office of the Latent Print/Impressions Unit will be opening at the Hagerstown Lab. Initially one examiner will be working at the facility in October 2015, but the future will bring additional staff. Customers are encouraged to refer to the Submission of Evidence Guidelines for information on utilizing the services of the LPIU. Inquiries regarding Latent Prints/Impressions can be directed to Unit Supervisor, Lawrence Ches, at 443-357-1503 or at lawrence.ches@maryland.gov.

Firearms/Toolmarks: The Firearms/Toolmarks Unit (FATMU) continues to have success within the programs they have implemented. The Walk-In Test Fire program was introduced in early 2013 to aid in quick turn-around times for allied agencies' operability-only cases. By appointment, an agency representative witnesses the test firing of qualifying cases and is provided with a certificate of the firearm's operability. Since February 2013, over 470 firearms have been worked through the Walk-In Test Fire program. Operation Test Shot was developed to allow allied agencies to test fire handguns at their own sites using Forensic Buddy systems provided by Maryland State Police and submit the test fires for NIBIN entry and storage. This is a valuable partnership with agencies throughout the state. Since May 2008, over 1,350 samples have been submitted by allied agencies. The unit also has, and continues, to maintain and store the Maryland Sample Reference Database of test fired cartridge cases from every new handgun sold in the state of Maryland since 2000. 68,883 handguns were entered into this database in 2014; however, it will be phased out in October 2015. Inquiries regarding Firearms and Toolmarks can be directed to Unit Supervisor, Torin "Zach" Suber, at 443-357-1462 or at torin.suber@maryland.gov.