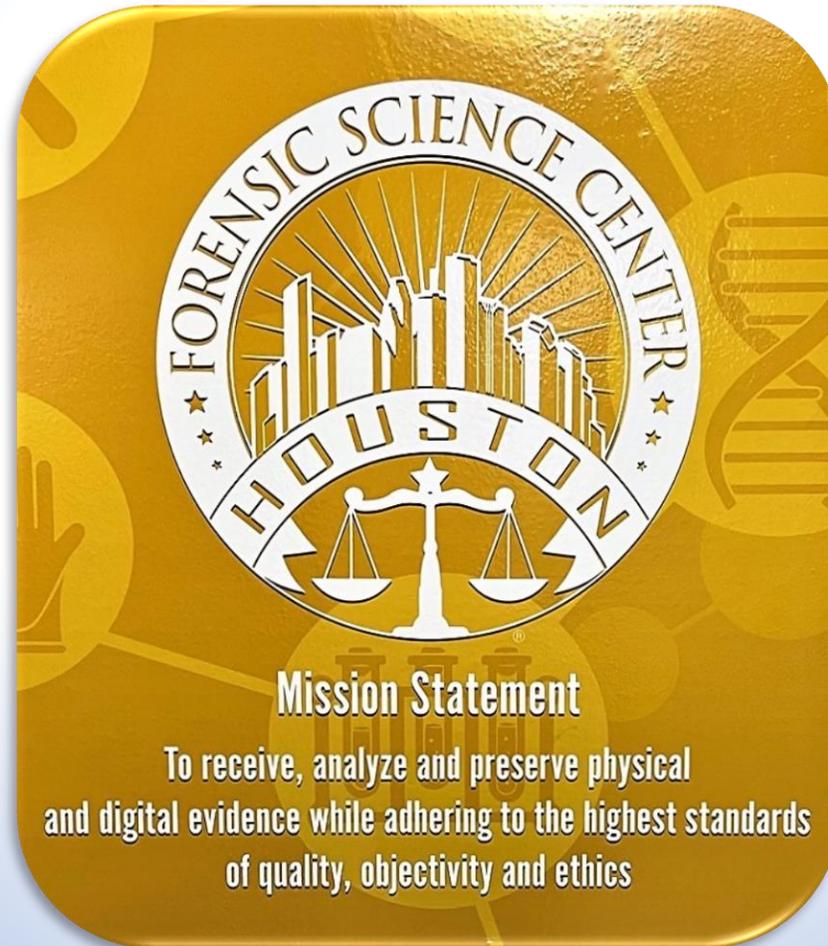
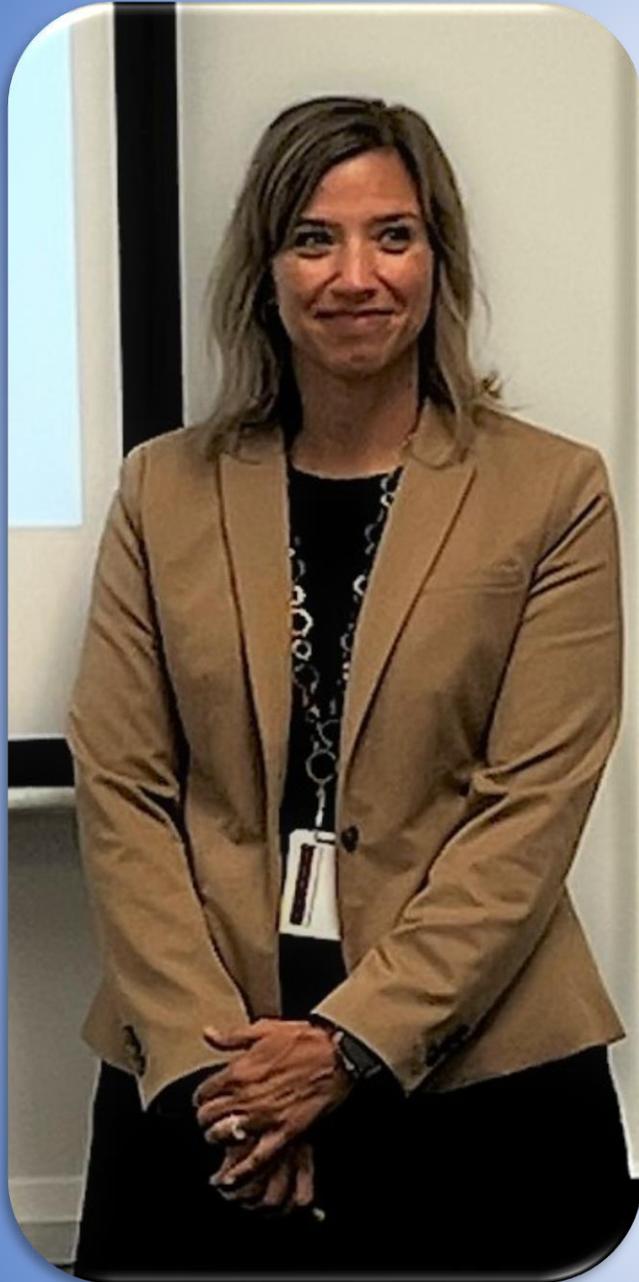


LEOH Trip

Houston Forensic Science Center

June 8, 2022





The Houston Forensic Science Center (HFSC) is located on the 13th floor at 500 Jefferson in downtown Houston, while the HFSC firearms and Crime Scene Unit divisions are housed in the building's basement.

Upon our arrival, we were escorted to a large conference room, where we were greeted by several department employees. Erika Ziemak (left), Quality Director, then gave a presentation and answered our many questions.

She discussed the ongoing issue of testing backlog. Referring some testing to another facility does not alleviate the problem, as that facility will have their own backlog of testing to be done.

We learned that the HFSC was created in 2012 as an independent, local government corporation whose mission is to provide forensic services to the Houston police department. It is governed by a nine-member board of directors appointed by the mayor and confirmed by city council.

Of particular interest is the fact that the board includes an exoneree; that is, a person who was previously found guilty of a crime and was later found to actually be innocent.

HFSC Objectives

- To provide quality analytical examinations
- To provide quality forensic investigations
- To meet or exceed all standards necessary to maintain accreditation
- To monitor and ensure the timely generation of test or investigative reports
- To enhance the scientific capabilities of HFSC



HFSC Facts

- It is one of the largest crime laboratories in the country
- It is comprised of 7 technical disciplines.
 - Toxicology
 - Firearms
 - Controlled Substances
 - Forensic Biology
 - Latent Prints
 - Multimedia
 - Crime Scene Unit (CSU)
- Support section divisions include Quality; Client Services and Case Management; Research & Development; and the Lean Six Sigma Group
- It has 200+ employees; 60% are less than 35 years old; over 80% are female
- In 2021, it received over 14,000 test requests





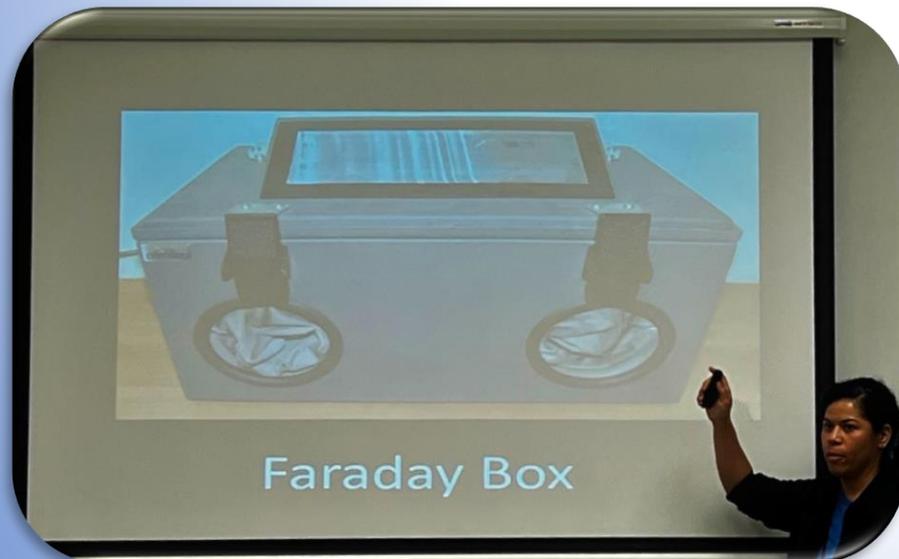
Multimedia – Digital Forensics and Forensic Audio/Video

Following Erika's presentation, Monica gave a slide presentation on her discipline specialty, the Multimedia division.



Crimes this division investigates include murders/homicide, fraud, narcotics/drug related, child exploitation/solicitation/pornography, robbery/burglary/theft, narcotics/drug related, and any internal investigations (misconduct)

Digital media includes any electronic device designed or utilized to store data, such as computers, USB drives, and telephones. Search warrants may be issued to email providers, social media outlets, app developers, cellular carriers, and online storage providers (the Cloud, Dropbox, etc).



Monica discussed the use of the Faraday Box and Faraday Tent to aid in investigation of items used to transmit or store data. The box and tent prevent remote wiping or altering of data on the item while it is being stored and investigated.

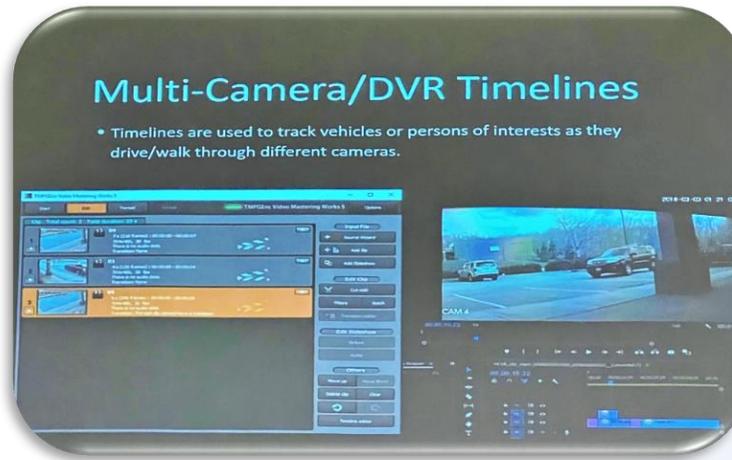


Multimedia, continued

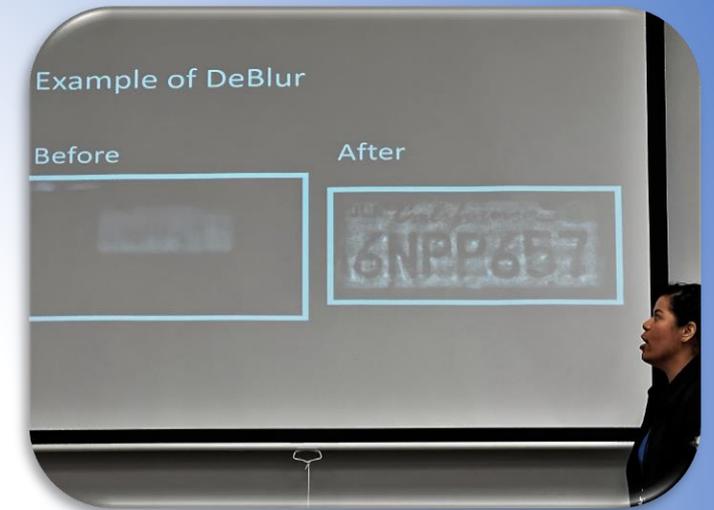


Amazing technology!

Note that the side view of the car in the image above prevents a view of the license plate; however, advanced technology manipulates the license plate angle to allow the plate ID to be viewed.



Various cameras pinpoint locations and establish timelines of a vehicle or pedestrian of interest in an investigation.

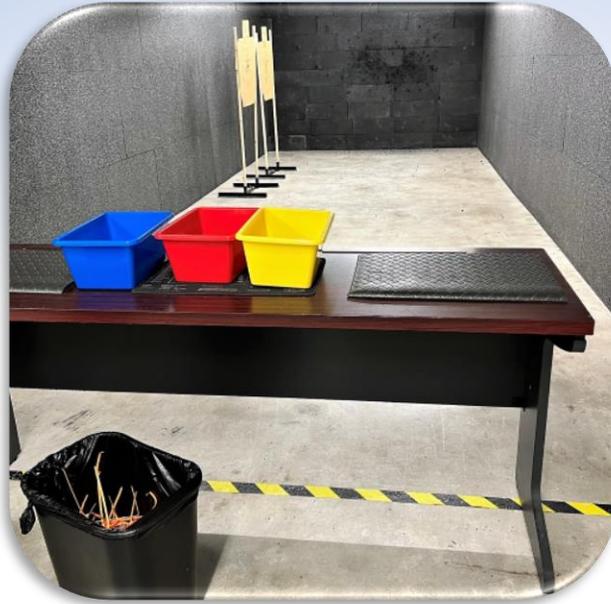


And even more amazing technology!

The *DeBlur* technology improves the unreadable license plate on the left to the readable plate on the right.



Firearms Division



We were split into two groups for division tours. The first stop for this group was certainly interesting. As our firearms expert talked, we viewed many rifles, including assault rifles, along with handguns. Some firearms may eventually be returned to their lawful owners, depending on an investigation's outcome. Firearms that were still part of active investigations were not allowed to be photographed.



Test-firing weapons occurs at their indoor range and in *The Boom Box*, which is filled with water to slow a fired bullet down and preserve it. Observation of the unique markings the gun under investigation makes on the fired bullet can then tie that gun to a specific crime.





Colorful murals decorated the hallways throughout, as we toured. Above, the latent print expert discusses the print extraction and identification process.

The FBI oversees the National DNA Index System (NDIS), which in turn oversees the states (SDIS). In Texas, the local divisions (LDIS) are in Houston, Austin, and Dallas.





We observed several testing areas associated with the various testing disciplines. The work areas, off limits to visitors, appeared to be quite pristine and well-organized, with staff wearing appropriate personal protective equipment.

To find out *much, much more* about the HFSC, view their impressive website at houstonforensicscience.org.



Following our visit, we headed to downtown **Finn Hall** for lunch. We enjoyed choosing from a variety of cuisine within this food hall.

Our bus driver, Roland Booker, was a safe and fun driver. He is, as he describes himself, “one of Precinct One’s best”. We tend to agree.

As always, trip coordinator Ann Fairchild planned and executed an excellent as well as educational trip!