

Houston Forensic Science Center, Inc.

VIRTUAL MEETING OF BOARD OF DIRECTORS

MINUTES

November 13, 2020

The undersigned, being the duly appointed secretary of the Houston Forensic Science Center, Inc., (“HFSC” and/or the “Corporation”) hereby certifies the following are true and correct minutes of the November 13, 2020 virtual meeting of the Board of Directors (the “board”) of the Corporation.

- A. In a manner permitted by the Corporation’s Bylaws, the meeting was called by providing all directors with notice of the date, time (instructions for Microsoft Teams access and call-in options) and purposes of the meeting more than three days before the date of the meeting.
- B. In accordance with Chapter 551, Texas Government Code and Governor Greg Abbott’s March 16, 2020 temporary suspension of certain provisions of the Texas Open Meetings Act, notice of this meeting was duly posted online to www.houstonforensicscience.org on November 10, 2020 along with a free-of-charge videoconference link, dial-in phone number and an electronic copy of the agenda packet, as required.
- C. The virtual meeting on Microsoft Teams was called to order by Board Chairwoman Stacey Mitchell at approximately 9 a.m. on Friday, November 13, 2020.
- D. Board Secretary Jordan Benton called the roll. The following directors were present: **Stacey Mitchell** (the chairwoman’s photo was visible in her icon during the meeting,) **Mary Lentschke** (“ML,”) **Philip Hilder** (“PH,”) **Francisco Medina** (“FM,”) **Janet Blancett** (“JB,”) **Lois Moore** (“LM,”) **Vicki Huff** (“VH,”) **Ellen Cohen** (“EC”) and **Tracy Calabrese** (“TC”)

Anna Vasquez was absent from the meeting. Chairwoman Mitchell declared a quorum.

- E. Director Blancett experienced technical difficulties with her computer’s microphone. Her video was temporarily unavailable during the meeting. She dialed into the meeting and left her computer audio muted and video camera turned on.
- F. Chairwoman Mitchell announced that HFSC’s virtual board meeting was being held in compliance with Governor Greg Abbott’s temporary suspension of certain provisions of the Texas Open Meetings Act in response to the COVID-19 pandemic.
- G. Director Calabrese stepped away from the meeting at approximately 9:03 a.m. She returned at approximately 9:06 a.m.
- H. Chairwoman Mitchell said the board agenda included an email address and phone number for members of the public to use to address the board. The Chairwoman asked Secretary Benton if any members of the public wished to address the board. Ms. Benton said no one had requested to address the board. The chairwoman opened the meeting for public comment. No one addressed the board. Chairwoman Mitchell said that she would close the public comment

period later in the meeting.

- I. Chairwoman Mitchell asked if any changes needed to be made to the October 9, 2020 board meeting minutes. No directors had changes. Director Moore made a motion to approve the minutes. Director Blancett seconded the motion. The Chair called for a voice vote and the motion passed unanimously.
- J. Chairwoman Mitchell presented a chair's report. She welcomed Mr. Darrell Davis, technical advisory group member, to the virtual meeting. Chairwoman Mitchell said she, Dr. Peter Stout, HFSC's president and CEO, and Mr. Jerry Pena, director of the crime scene and multimedia units, met with Houston Councilmember Abbi Kamin to discuss the challenges HFSC's crime scene unit is grappling with, including a staffing shortage, increased homicide call-outs and mental fatigue and exhaustion. She mentioned that we will continue the conversation with CM Kamin's office. She told the board that HFSC will not host its annual holiday party due to the pandemic and instead, the board and executive staff can donate to fund small gifts for HFSC staff to thank them for their work since HFSC does not use budget dollars for these types of expenses.
- K. Chairwoman Mitchell asked Secretary Benton if any members of the public had joined the meeting to speak during the public comment period. No one addressed the board, and the public comment period closed at 9:10 a.m.
- L. Dr. Peter Stout, president and CEO, told the board that the lab's overall turnaround time reflects sections working through their backlogs, including latent prints, toxicology and forensic biology/DNA. HFSC currently has 203 staff and 10 openings. An experienced forensic biology/DNA analyst will join HFSC sometime in January. The new marijuana testing method implemented in the seized drugs section has caused a strain, so the vacant position was filled. Latent Print Supervisor Ms. Jeniffer Molina was promoted to the section's technical leader position, formerly filled by Ms. Rebecca Green who promoted to latent print manager.

Dr. Stout said the crime scene unit will hire a new supervisor and two additional crime scene investigator trainees who will travel to the National Forensic Academy in Tenn. Dr Stout reviewed staff certifications and awards. Dr. Stout said he attended an HFSC press conference with Dr. Dayong Lee, HFSC toxicology manager, to discuss an article they published with Ms. Corissa Rodgers, HFSC toxicology supervisor, and Ms. Melissa Lloyd in the Journal of Analytical Toxicology that highlighted the demographics of impaired drivers in Houston.

Dr. Stout shared other recent outreach events, including a virtual presentation he gave about accreditation, standards and blind quality controls with Ms. Lynn Garcia of the Texas Forensic Science Commission, Ms. Erika Ziemak, HFSC's quality director, and Mr. Mark Stolorow of the National Institute of Standards and Technology (NIST) to the Center for American and International Law. Dr. Stout highlighted recent staff outreach.

Dr. Stout said construction at the vehicle examination building (VEB) is largely complete, including the installation of a new air conditioning system, overhead doors for the vehicle bays and bathroom, and is slated to wrap up on November 13. Dr. Stout said part of HFSC's IT connectivity will be housed at the VEB, and the target date for completion is January 2021.

- M. Dr. Stout reminded the board that in May they approved a standing purchase order between HFSC and vendor ThermoFisher Scientific. The vendor sent HFSC 15 extra Quantifiler Trio Kits in October by mistake, which HFSC is allowed to keep for half the original cost. Dr. Stout said the additional kits increased the originally agreed purchase amount to \$475,030.00, a larger cost overall but a greater discount for needed supplies that would ultimately be purchased anyway. He requested the board approve the new total for the purchase of these additional kits. Director Cohen made a motion to approve. Director Hilder seconded the motion. Secretary Benton called the roll, and the following directors were in favor: Stacey Mitchell, Mary Lentschke, Philip Hilder, Francisco Medina, Janet Blancett, Lois Moore, Vicki Huff and Ellen Cohen. The motion passed unanimously.
- N. Dr. Amy Castillo, vice president and COO, told the board that the technical sections struggled in October since most are operating at 50 percent capacity. She said staff will receive a survey in November to share feedback about HFSC's response to the pandemic, what steps need to be taken for staff to feel safe to work onsite more often and what resources they need to continue working remotely. HFSC leadership will review the responses to implement changes early next year.

Dr. Castillo said seized drugs, client services and case management and firearms are the three most impacted sections since they are unable to perform casework at home and have operated at 50 percent capacity onsite. Dr. Castillo outlined the operations report schedule, saying the board will hear an update about the seized drugs section in December, a backlogs and firearms section update in January, a latent print and forensic biology update in February and lab process improvement and research and development updates in March. Dr. Castillo said the CS/CM division continues to meet evidence transfer demands even with only 50 percent of staff onsite and have maintained a less than three-day turnaround time throughout the pandemic accessioning blood alcohol kits for the toxicology section.

She added that CS/CM implemented an electronic process to provide stakeholders with document requests. The new process has been well-received by stakeholders and also helps improve the health and safety of staff by limiting onsite visitors. The seized drugs section has operated at 50 percent capacity onsite throughout the pandemic but has maintained an overall turnaround time of 14 days. That average has increased slightly for a few reasons: The new time-consuming, semi-quantitative testing method used to determine if suspected marijuana is above or below the 1 percent threshold, a week-long operational interruption from Hurricane Laura and additional testing time needed for methamphetamine since a shortage of the drug has impacted its purity and requires analysts to test more of the drug to meet the minimum threshold for testing. Dr. Castillo said at the end of October, the section had 47 cases in its backlog, 39 belonging to marijuana cases that need to be tested in compliance with the new method and only three analysts in the section are approved to perform this testing method.

Dr. Castillo said that as the three analysts become more proficient and additional analysts are approved to use the new method, she anticipates the backlog will decrease. The seized drugs section has seen about a 50 percent dropped in requests received since the start of the pandemic, but the section saw pre-pandemic case submissions rise in October. The section will monitor the number of cases received the remainder of the year to determine any potential impacts to their workload.

Dr. Castillo said funding received from the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, will help the seized drugs section purchase software to network their instrumentation and upgrade their computers so more work can be done from home. She said the section's capacity will decrease as they implement these upgrades prior to year's end. Blood alcohol testing in the toxicology section is on track with the three-year section plan Dr. Lee presented to the board in September, and that the backlog continues to decrease as five analysts are trained by section staff to eventually perform independent casework. The cross training will impact the number of blood alcohol cases eliminated each month, but the backlog should be eliminated by April 2021. Dr. Castillo added that about 30 percent of blood alcohol cases require drug screening, and while analysts are trained on drug analysis testing, an uptick in cases will be seen.

The firearms section's turnaround time rose to an average of 64 days in September and 61 days in October since examiners are limited on the amount of casework they can do remotely. NIBIN requests, the National Integrated Ballistics Information Network, has maintained a less than 45-hour turnaround time despite an increase in the number of firearms received. The forensic biology/DNA section fell short on its backlog request goal by reaching 962 requests instead of 940. This is due in part to more requests received in September and October than originally anticipated, in addition to an experienced analyst's promotion into the training coordinator role. 63 rape kits from the in-house backlog were completed, bringing the overall total down to 797. Dr. Castillo reminded the board that in April the forensic biology/DNA section had over 1,000 outsource reports to review, and the section will work to prevent the backlog from building in the future by aiming to complete them within 30 days from being assigned. Dr. Castillo said the latent print processing section, which is responsible for lifting prints off items and capturing images for the latent print examiners, has struggled with a large backlog due to insufficient staffing. A vacant latent print examiner position will be converted to a third latent print processor role to help eliminate the backlog and keep up with incoming work. She reminded the board that the process improvement project for the latent print section will begin November 5, and that the section's casework output will be impacted since examiners on the project team will dedicate 25 percent of their time to the project.

- O. Dr. Stout said HFSC's crime scene unit is facing various challenges, and as the unit collects more evidence, sections like latent prints, firearms, digital and multimedia and forensic biology/DNA will be impacted. Houston's rising homicide rate has put a strain on CSU, with October's callouts for service nearly double compared to October 2019. Dr. Stout said CSU is responding primarily to homicides, child deaths and officer involved shootings, leaving little to no resources for CSIs to respond to other types of scenes such as aggravated assaults. Houston has seen about a 43 percent increase in homicides this year, a burden to HFSC's 22 CSIs. In comparison, Chicago has 200 CSIs that respond to over 600 homicides a year along with a different mix of crime compared to Houston. CSU has not only seen an uptick in vehicle processing requests and responses to other types of crimes, but beginning in May 2019, the increase in callouts began with no decrease since, an indication that HPD is relying on the quality work HFSC's accredited CSU performs. Dr. Stout said CSU mapped a distribution of crime in Houston, with peak crime times falling on Friday's around 2 a.m. and Wednesday evenings. He said CSU must create additional resources within its current fiscal year budget given the lack of funding options, and that CSI trainees will be sent to the National Forensic Academy in January and April to assist with staffing. The unit will add another supervisor to help respond to CSI questions, field calls from investigators and perform casework reviews.

Director Hilder asked if there are any other funding options CSU could consider. Dr. Stout said there has been conversation at the national level, but no action has been taken to provide additional funding for CSU, nor are there grant opportunities for the unit. Director Blancett asked if HFSC could recruit for CSIs in the academic or military fields. Dr. Stout said HFSC receives a surplus of applications for entry-level CSI positions, but finding experienced investigators is a struggle.

- P. Mr. Jerry Pena, director of the crime scene unit and multimedia section, told the board that CSU's five-year plan spanning from 2022 to 2026 calls for an additional 30 CSIs, six supervisors, five CS/CM personnel and 10 vehicles. He said the personnel cost over the next five years will cost approximately \$320,000, and by 2026 the unit will incorporate technology like drones and FARO scanners which help map crime scenes. Mr. Pena added that the drone program should be complete by the end of the year to early next year, and the implementation of a drone will reduce the amount of time CSIs spend on field documentation. The addition of 30 CSIs over five years is small compared to the 100 to 150 CSIs truly needed for the unit to better serve Houston's needs. New York has about 100 more homicides than Houston and staffs about 100 CSIs, who are essentially investigators that receive support from around 300-400 evidence technicians that work in unison with CSIs to collect evidence and handle documentation on scene.

CSU will send six trainees to the National Forensic Academy annually and at the end of five years would staff 64 CSIs. Director Huff asked if HFSC could mimic New York's model for CSU. Mr. Pena said New York has around 45,000 officers who work everything from property to person crimes, and the model could work if HFSC had significantly more staff and expanded its callout type. Mr. Pena said CSU's five-year model reflects year-over-year costs, including pay raises.

Director Hilder asked what resources CSIs have to help combat mental fatigue and burnout. Dr. Stout said HFSC has a certified trauma therapist available, resources through the Employee Assistance Program and have also welcomed back former HFSC Director of Information Strategy, Mr. Darrell Stein, who is a minister in a church and available to speak to staff when needed.

Mr. Pena said CSU is requesting a command vehicle to serve as a rest station, help deploy supplies and equipment so CSIs working larger scenes do not have to rely on limited vehicles. Mr. Pena walked the board through the year-over-year capital expenses. In 2022 he projects CSU will acquire two vehicles, a command vehicle and a drone totaling \$198,000. In 2023, CSU will acquire a FARO scanner, three vehicles and convert the crime scene house into additional office space with necessary system upgrades totaling \$239k. In 2024, CSU will spend \$74,000 on connectivity costs and two vehicles. In 2025, CSU will spend \$168,000 for IT connectivity costs and purchase another FARO device, another drone and three vehicles. In 2026, CSU will purchase two more vehicles totaling \$74,000. After five years, the total capital expenses are expected to average about \$753,000. The year-over-year total cost, including personnel, will average about \$9,128,000.

- Q. Dr. Preshious Rearden, director of research and development, said the research and development (R&D) division manages and oversees several systems and programs at HFSC. She said R&D handles all technical, non-casework related activities, included HFSC's

Laboratory Information Management System (LIMS,) which analysts use to track evidence received at HFSC. Dr. Rearden said she and her team, comprised of Dr. Jennifer Hsu and Ms. Tammy Beals, also assist with professional development activities, perform validations and develop testing methods for sections. R&D collaborates with HFSC's process improvement projects, manages the laboratory's internship program and is responsible for all research grants at HFSC.

Dr. Rearden said HFSC's internship program, which became virtual because of the pandemic, is open throughout the year, and college students can apply to work with all forensic and administrative sections. Dr. Rearden said last year, R&D troubleshoot and processed over 1,200 LIMS and request portal tickets, and that all forensic disciplines but forensic biology/DNA are live in the system. Dr. Rearden said HFSC received a grant from NIST in collaboration with the Center for Statistics and Applications in Forensic Evidence to fund a fulltime position at the lab to help with the blind quality control program. She added that HFSC is using the lab efficiency grant awarded by the National Institute of Justice (NIJ) to renovate the VEB.

Dr. Rearden told the board that HFSC received a grant from the NIJ to develop a quality model for identifying the quality of mass spectral data collected using gas/chromatography/mass spectrometry in seized drug analysis. In collaboration with Dr. Peter Harrington from Ohio University. R&D is working on this quality model to help give analysts a more quantitative tool to identify sufficient quality mass spectral data for the identification of unknown compounds in samples. Dr. Rearden further explained that forensic disciplines at HFSC fall into two categories: lab-based disciplines that rely heavily on instrumentation and technology and pattern evidence disciplines that rely on expert interpretation. The GC/MS testing method relies on the principles of analytical chemistry, but also possesses many characteristics of pattern science because of the requirement to interpret mass spectral results. Dr. Rearden said that if an unknown spectrum is generated from GC/MS analysis, that spectrum is then compared to a reference spectrum in a library. The similarities that occur between spectrums render a "hit" list that is sorted by similarities to known spectrums. The quality of the unknown spectrum, such as concentration or contamination levels, can also impact results. The new quality model will provide the analyst with a quantitative threshold that can be used to provide an independent statistical model in each library search. R&D tested the quality model on historical seized drugs case files and experimental opioid mixtures, and the results were reliable. Dr. Rearden said R&D is working on manuscripts for the project and presented its work at the SciX2020 conference. She added that R&D will work to secure additional funding, expand the quality model methodology to other classes of drugs and collaborate with other laboratories to validate and test the method. Chairwoman Mitchell said the 2009 National Academy of Forensic Science report highlighted the importance of R&D within laboratories so better processes can be refined and elevate the level of work performed.

- R. Ms. Aimee Grimaldi, project engineer, said the latent print section began its process improvement project on November 5. The project team must meet virtually due to safety precautions but has adapted to perform tasks digitally to ensure the success of the project. Ms. Grimaldi said the project team identified the following areas to improve: Workflow efficiency, improved turnaround time and a strategy to eliminate the backlog. The team will also consider the rise in requests expected from CSU's future expansion and will consider a staffing model projection. Ms. Grimaldi said the project team is comprised of 50 percent latent print examiners and staff from the firearms, quality and R&D sections. Subject matter experts from

CSU, CS/CM and quality will support the project. Ms. Grimaldi said the 9-month-long project scope will examine the latent print processing and comparison processes from start to finish. She reiterated that the latent print section's work output will be impacted since seven latent print staff are on the team.

Ms. Grimaldi reminded the board that the technical and administrative review and quality score projects began in June 2019. The technical and administrative review project focused on improving HFSC's review process, and the second project aimed to design an actionable quality metric for HFSC. Ms. Grimaldi said both projects encountered interruptions, such as the lab-wide move to 500 Jefferson, the pandemic and Hurricane Laura preparations. The quality score project ended in October, and the review project, overseen by Ms. Paula Evans, project engineer, will be completed in December. Ms. Evans' project team saw significant improvements after incorporating improvements to the process. Seventy one percent of services had improvements in the number of defect-free cases, 57 percent of services saw an improvement in defects per request and 54 percent saw improvements in the review error rate. The team accomplished these improvements by increasing visibility into process by designing a dashboard that automatically pulls data from LIMS. The quality score project's goal was to design an actionable quality metric. The project team developed three scores: Professional development, compliance and preventative initiatives. All metrics were released in a dashboard so staff can see automated and up-to-date data regularly. Ms. Grimaldi said the quality score team will continue to improve the dashboard.

- S. Ms. Erika Ziemak, quality director, said the quality division met its monthly goals for blind quality control submissions in October except for the latent print processing blind which is prepared by the section's technical leader. She added that two potential cases were identified for November. Ms. Ziemak said between September 30 to the first week of November, four presentations were given about the blind quality control program, including one to a group of 50 graduate and undergraduate forensic science students at Virginia Commonwealth University. Two quality staff presented about the blind program to about 200 attendees from the Association of Forensic Quality Assurance Managers. Ms. Ziemak said a manuscript was submitted to the Forensic Science Review Journal that highlights HFSC's quality initiatives, including the blind and transcript review programs. Ms. Ziemak said a blind submission helped create a process improvement in the latent print processing section. When a blind case is submitted into the processing section, a latent print processor is responsible for developing any suitable latent prints and submitting a latent print comparison request. A comparison request was never made for the blind, which highlighted the need for a process that will help track when one is submitted. The quality division performed an audit and looked at 169 cases that could have been impacted, and no instances of a missed request were found. Now, latent print processing has a system to track requests which will be reviewed monthly.

Ms. Ziemak said HFSC is working towards achieving compliance with standards placed on the OSAC, or Organization of Scientific Area Committees, registry. HFSC declared compliance with OSAC's standard practice for forensic practitioner training, continuing education and professional development programs by revising every training manual at HFSC, a lengthy process. Now, HFSC has mandated that staff must complete at least 16 hours of continuing education annually. Ms. Ziemak said HFSC created a continuing education committee responsible for making documents and sharing information with staff to ensure training and credits given are consistent. A workflow was designed to capture training information for each

staff member which can be viewed in a company-wide dashboard that can be filtered by staff member name, date and section.

Ms. Ziemak said the forensic biology/DNA section had its external FBI quality assurance assessment from October 13-15. One assessor came onsite while two others worked remotely, and no findings were reported from the assessment. Ms. Ziemak said the forensic biology/DNA section is actively implementing recommendations made by the lead assessor to help improve documentation in the section.

HFSC's internal safety and security audit began October 30 and is expected to last one week. Ms. Ziemak said the safety and security manuals will be reviewed to ensure lab-wide compliance, and she will report any audit findings at the next board meeting.

Ms. Ziemak reminded the board about a CSI's proficiency test issue she shared last month. She clarified that at the October board meeting, she mistakenly stated the proficiency test had five samples instead of six. The CSI who achieved non-consensus results will be unable to perform the specific test in casework until the quality division completes its investigation. So far, the quality team identified three out of 211 cases completed by the CSI where the same testing method was performed. Ms. Ziemak will report the findings at the next board meeting.

Ms. Ziemak said jury trials resumed in October, and that three of the 23 analysts that testified this year were not monitored in-person. Those analysts will have their testimony transcripts reviewed instead.

- T. Chairwoman Mitchell requested a motion to adjourn the meeting. Director Moore made a motion to adjourn. Director Hilder second the motion. The meeting ADJOURNED at approximately 11:49 a.m.

By: _____

Jordan Benton Secretary