Houston Forensic Science Center, Inc.

MEETING OF BOARD OF DIRECTORS MINUTES January 10, 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 January 10, 2020 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, place and purposes of the meeting more than three days before the date of the meeting.
- B. In accordance with Chapter 551, Texas Government Code, made applicable to the Corporation by Section 431.004, Texas Transportation Code, a notice of the meeting was duly posted on January 7, 2020, in the same manner and location as required by law of the City of Houston, Texas (the "City".)
- C. The meeting was called to order by Dr. Stacey Mitchell, board chairwoman, at approximately 9 a.m. on Friday January 10, 2020 in the Council Annex Chambers, 900 Bagby St. (Public Level), Houston, Texas 77002.
- D. Ms. Jordan Benton called the roll. The following directors were present: Dr. Stacey Mitchell, Philip Hilder, Francisco Medina, Janet Blancett, Dr. Robert "Bob" H. McPherson, Mary Lentschke and Ms. Tracy Calabrese

Ms. Anna Vasquez was absent from the meeting.

Chairwoman Mitchell declared a quorum was present.

Vice Chair Lentschke left the meeting at approximately 10:17 a.m. Mr. Medina left the meeting at approximately 11 a.m. Chairwoman Mitchell noted the board no longer had a quorum.

- E. Chairwoman Mitchell asked if any changes were needed for the November 18, 2019 special meeting minutes. No directors had changes. Mr. Hilder made a motion to approve the minutes. Mr. Medina seconded the motion. The motion passed unanimously.
- F. Chairwoman Mitchell asked if members of the public wished to address the board. No one addressed the board.
- G. Chairwoman Mitchell presented a chair's report. Dr. Mitchell said she attended HFSC's January all-staff company meeting and addressed employees, thanking them for their hard work.

- H. Chairwoman Mitchell presented the board with a resolution to designate the annual selection of the Vice Chair of the board to coincide with the annual appointment of HFSC's corporate officers. Dr. McPherson made a motion to pass Resolution 2020-001. Mr. Hilder seconded the motion. The motion passed unanimously.
- I. Dr. Peter Stout, president and CEO, gave the president's report. Dr. Stout reviewed HFSC's overall turnaround time and requests for December 2019. Dr. Stout gave a staffing update and shared certifications earned by staff. He said HFSC has completed the lab-wide move to 500 Jefferson and all disciplines are operational. Dr. Stout said the toxicology section resumed blood alcohol analysis on December 30, but drug analysis will not restart until later this year after the section validates two new instruments. Dr. Stout shared the findings of a needs assessment required by the 2016 Justice for All Act. He said the National Institute of Justice (NIJ) report revealed an annual \$640 million resource gap in forensics, noting there are 570,000 backlogged requests nationwide. Dr. Stout said seized drugs composed the majority of the backlogged requests, in part due to the nation's opioid crisis. He said the NIJ's report also showed forensic science operations provide about a 5,000 percent social return on investment, noting there is a \$20,000 social welfare saving from entering just one DNA profile into the national DNA database. Dr. Stout said the report praised HFSC for its transparency, eDiscovery website, and the latent print section's preliminary investigative reports, which were hailed as a process improvement. Dr. Stout shared details of a recent case in which new DNA analysis has excluded a man convicted and incarcerated for a 2010 murder. A jury convicted Lydell Grant in 2012 for the fatal stabbing that occurred in the parking lot of a Houston nightclub. Dr. Stout said that conviction was largely based on testimony from six eyewitnesses who identified Mr. Grant as the killer in a photo array. He said the Houston Police Department's DNA section reported the DNA evidence as inconclusive at that time, meaning analysts could not determine if Mr. Grant's profile was included or excluded from the items. Dr. Stout said the Innocence Project took on the case. In retesting, analysts used a new DNA analytical method, probabilistic genotyping, to interpret the evidence that excluded Mr. Grant and developed a different profile that was uploaded into the National DNA database. The profile got a hit, pointing to another suspect. HPD located the suspect in Atlanta, Ga. where he confessed to the murder. Dr. Stout said that Mr. Grant has been freed from jail as he waits for a ruling of "actual innocence." Dr. Stout said that since the incident, improvements have been made to the wording used in DNA reports. He said this case will be used to continue conversations regarding how data gets used and interpreted when it comes to complex DNA mixtures, in addition to showcasing the importance of unbiased testimony and transparency.
- J. Dr. Amy Castillo, vice president and chief operations officer, presented an operations report. Dr. Castillo gave an overview of turnaround times and backlogs. She updated the board about the forensic biology/DNA section's backlog and its outsourcing and training project. She said there are 242 backlogged cases inhouse, down from 1,086 cases in July 2018. However, 977 cases analyzed by a commercial DNA company are awaiting review to determine eligibility for upload into the National DNA database, or CODIS. Dr. Castillo said another 1,771 cases completed by the commercial lab have already been reviewed. Dr. Castillo said that after the biology section completes its training program, there will be one part-time and 11 full-time report writers and nine employees reviewing cases that return from the commercial laboratory. She said 12 experienced report writers are in STRmix, a probabilistic genotyping software, training and three report writers had completed the training. Dr. Castillo reviewed challenges that impacted the forensic biology section's progress with training and its backlog last year,

including HFSC's facility move, the outsource lab's unanticipated 120-day turnaround time, internal promotions that left vacancies and probabilistic genotyping training which has taken longer than anticipated. Dr. Castillo said moving forward, the forensic biology section may send one final outsource shipment using grant funds, but only if the outsource lab has the capacity to work the cases in a timely manner. She said ideally, the section will be able to work all cases in-house without outsourcing them.

- K. Mr. David Leach, CFO and treasurer, said HFSC's budget is on track. Mr. Leach said HFSC has reached the halfway point of the fiscal year and that he will ask the board to approve a new budget at the March board meeting. Mr. Leach said he anticipates asking the board to approve budget reallocations at the February meeting. Mr. Leach reviewed financial charts and grant spending.
- L. Mr. Jerry Pena, director of the crime scene unit (CSU) and digital multimedia division, said two CSU supervisors had resigned and that HFSC is recruiting internally to fill the vacancies. Mr. Pena said he is working to have new crime scene investigators trained at the National Forensic Academy in Tennessee to decrease pressure and interruptions to the section when training is done internally. He said training new CSIs in this manner will be cost-effective and will eliminate the need to remove experienced staff from their duties to train others. Mr. Pena showed the board photos of two new CSU vehicles that HFSC purchased. He said each vehicle cost about \$30,000. Mr. Pena also shared images of the vehicle examination bay and said Mr. Charles Evans, director of business development, would share details about upcoming in his report.
- M. Ms. Robin Guidry, DNA technical leader, gave the board an overview of probabilistic genotyping and explained why HFSC will be implementing this interpretative method in the forensic biology/DNA section. Ms. Guidry said the probabilistic approach uses biological modeling, statistical theory, algorithms and probability distributions to infer likelihood ratios. This means the software gives a statistical value to which of two hypotheses is more likely. She said probabilistic genotyping allows analysts to make better use of the data because the software can do math that is too complex for human interpretation. Ms. Guidry said technology and science are improving, but that also complicates the data, making it more difficult to interpret. She said as a result, analysts need to improve their ability to interpret and make better use of the data being provided. HFSC will be using STRmix, one of the available probabilistic genotyping softwares. The software minimizes some weaknesses in the current methods, including removing some inherent bias in part because of the complex math the software can perform. Ms. Guidry said STRmix allows for better interpretation of complex mixtures that include several different DNA profiles. She said the concepts used in the software are new to forensics but have long been used in other fields, such as code breaking and aeronautics. Ms. Guidry said STRmix does not remove the human element and it will likely take analysts longer to complete each case because there will be more data to interpret. Ms. Guidry said stakeholders will likely ask the section to re-analyze old cases that were uninterpretable using the old methods. This too may impact the section's turnaround time. She shared that upgrades to STRmix will be implemented over time. Director Blancett asked Ms. Guidry if the forensic biology section will need to revalidate equipment after upgrades are implemented. Ms. Guidry said that validations will need to be redone, but the upgrades implemented over time will benefit casework and will be selected on an as-needed basis. Ms. Guidry told the board that the use of the software is being challenged in some court cases, including an instance in October

2019 where a judge excluded the use of STRmix data in a federal court in Michigan due to concerns raised about the lack of standards for the software since only guidelines exist at this time. She said concerns over the limitations established regarding the software's validation being exceeded in the case were also a factor. Ms. Guidry said HFSC is training internal and external stakeholders.

- N. Vice Chair Lentschke left the meeting at approximately 10:17 a.m.
- O. Mr. Evans summarized HFSC's move to 500 Jefferson. He said the project lasted 17 months and was completed under budget. Mr. Evans said the vehicle examination bay, which is used by CSU to process vehicles, will be renovated using \$114,000 in federal grant dollars. HFSC is required to match the grant with \$38,000 of its own money. Mr. Evans said the grant rules require the renovations to be completed by December 2020. HFSC will enclose four open vehicle bays to minimize exposure and contamination of evidence and install air-handling systems in those areas. Mr. Evans said CSU processes an average of 46 vehicles at the VEB monthly. This includes dusting for fingerprints, collecting DNA and photographing the vehicles.
- P. Mr. Medina left the meeting at 11 a.m. Chairwoman Mitchell interrupted Mr. Evans' report to note the board had lost its quorum. She said the remainder of the meeting would be informational and there would be no further deliberations or discussions.
- Q. Ms. Erika Ziemak, quality division director, gave the board an overview of 2019 blind quality controls. She also reviewed audits, disclosures, corrective actions, proficiency tests, transcript reviews and testimony data. Ms. Ziemak said the quality division is using each section's 2019 output numbers to determine how many blind quality controls each one should have in 2020. The goal is 5 percent for each section. Ms. Ziemak said HFSC staff had an article published in the Journal of Forensic Sciences. The article is titled "Implementation of a Blind Quality Control Program in a Forensic Laboratory." She said HFSC will present about blind quality controls in a Center for Statistics and Applications in Forensic Evidence webinar. Ms. Ziemak said technical experts monitored 51 analysts that testified in 2019. She said HFSC will also review 12 transcripts for 2019. Ms. Ziemak said an assessor will visit HFSC January 13 to assess the lab's new building. She said the final report will be provided to ANAB, HFSC's accrediting body. The assessment will focus on calibrations, performance checks and security.

R. With no quorum present, the meeting ADJOURNED at approximately 11:17 a.m.

Jordan Benton Secretary