

TEXAS FORENSIC SCIENCE COMMISSION

Justice Through Science

BITE MARK CASE REVIEW REPORT

November 3, 2017



A. SUMMARY OF THE COMMISSION’S STATUTORY AUTHORITY

The Texas Legislature created the Texas Forensic Science Commission (“Commission”) during the 79th Legislative Session by passing House Bill 1068 (the “Act”). The Act amended the Texas Code of Criminal Procedure to add Article 38.01, which describes the composition and authority of the Commission.¹ During subsequent Legislative Sessions, the Legislature further amended the Code of Criminal Procedure to clarify and expand the Commission’s jurisdictional responsibilities and authority.²

The Commission has nine members appointed by the Governor of Texas.³ Seven of the nine commissioners are scientists or medical doctors and two are attorneys (one prosecutor nominated by the Texas District and County Attorney’s Association, and one criminal defense attorney nominated by the Texas Criminal Defense Lawyer’s Association).⁴ The Commission’s Presiding Officer is Jeffrey Barnard, MD. Dr. Barnard is the director of the Southwestern Institute of Forensic Science and the Chief Medical Examiner of Dallas County, Texas.⁵

B. BACKGROUND LEGAL ISSUES

1) Procedural History and Status of Steven Mark Chaney Case

Mr. Chaney was tried on October 28, 1987, for the murder of John and Sally Sweek. A mistrial was declared on November 16, 1987. On December 8, 1987, the State proceeded to trial against Mr. Chaney again for the murder of John Sweek. Mr. Chaney was convicted of murder on December 14, 1987, sentenced to life in prison, and fined \$5,000. His conviction was affirmed by the Court of Appeals, Dallas in 1989.

¹ See Act of May 30, 2005, 79th Leg., R.S., ch. 1224, § 1, 2005.

² See e.g., Acts 2013, 83rd Leg., ch. 782 (S.B.1238), §§ 1 to 4, eff. June 14, 2013; Acts 2015, 84th Leg., ch. 1276 (S.B.1287), §§ 1 to 7, eff. September 1, 2015, (except TEX. CODE CRIM. PROC. art. 38.01 § 4-a(b) which takes effect January 1, 2019).

³ *Id.* at art. 38.01 § 3.

⁴ *Id.*

⁵ *Id.* at § 3(c).

Mr. Chaney filed a Writ of Habeas Corpus on October 12, 2015, on the grounds that he was entitled to relief under Article 11.073 because new scientific evidence about bite mark comparison contradicted the bite mark testimony presented at his trial. He also presented claims for relief under Article 11.07 on the grounds that false evidence about the probability that he made the bite mark was presented at his trial in violation of his due process rights; that the State's failure to disclose an exculpatory blood test and certain impeachment evidence violated his due process rights under *Brady v. Maryland*, 373 U.S. 83 (1963); and that newly discovered evidence demonstrated his actual innocence.

On October 12, 2015, the trial court entered agreed findings of fact and law concluding that Mr. Chaney was entitled to relief on his 11.073 claim and his claim under Article 11.07 regarding false testimony. The Court reserved findings and recommendations on Mr. Chaney's claims under Article 11.07 regarding *Brady* and actual innocence.

On May 4, 2016, the Texas Court of Criminal Appeals remanded the case back to the trial court to enter findings of fact and law within 90 days on Mr. Chaney's *Brady* and actual innocence claims, or to make a determination that Mr. Chaney was abandoning those claims. On August 4, 2016, an extension was granted. On September 9, 2016, Mr. Chaney filed a Second Amended Application, which included new developments related to his claim under Article 11.703, an additional false evidence claim relating to the timing of the purported bite mark, and new evidence of actual innocence.

On September 9, 2016, the trial court entered agreed findings of fact and law concluding that Mr. Chaney demonstrated entitlement to relief on his *Brady* claim and that he had shown no reasonable juror would have convicted him in light of the new evidence. The court also concluded

that Mr. Chaney's new evidence relating to 11.073 further supported his claim and that he was entitled to relief on his additional false evidence claim.

Mr. Chaney's application was ordered filed and set for submission on April 19, 2017. The Texas Court of Criminal Appeals has not yet ruled.

Because the Commission already addressed Mr. Chaney's complaint and issued a related report on February 12, 2016 as discussed in Section C below, the transcript in his case was not reviewed by the team.

2) Admissibility of Bite Mark Comparison Analysis in Texas Courts

Article 38.35 of the Texas Code of Criminal Procedure prohibits forensic analysis from being admitted in criminal cases if the entity conducting the analysis is not accredited by a national accrediting body recognized by the Commission:⁶

“...a forensic analysis of physical evidence under this article and expert testimony relating to the evidence are not admissible in a criminal action if, at the time of the analysis, the crime laboratory conducting the analysis was not accredited by the commission under Article 38.01.”⁷

The term “forensic analysis” is defined as follows:

“Forensic analysis” means a medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action, except that the term does not include the portion of an autopsy conducted by a medical examiner or other forensic pathologist who is a licensed physician.⁸

The term “crime laboratory” is broadly defined, as follows:

“Crime laboratory” includes a public or private laboratory or other entity that conducts a forensic analysis subject to this article.⁹

⁶ Until the 84th Legislative Session, the accreditation program was under the authority of the Department of Public Safety (“DPS”).

⁷ TEX. CODE CRIM. PROC. § 38.35(a)(4).

⁸ *Id.* at 38.35 § (a)(4).

⁹ *Id.* at § 38.35(d)(1).

The statute also exempts certain forensic disciplines from the accreditation requirement either by statute, administrative rule, or by determination of the Commission.¹⁰ On July 18, 2016, the Commission submitted a request for legal opinion to the Texas Attorney General's office regarding the applicability of the Code to bite mark comparison. (See **Exhibit A**). A key threshold question was whether the discipline is subject to the accreditation requirement.¹¹ Neither the statute nor the administrative rules transferred to the Commission from the Department of Public Safety which previously performed the accreditation function for Texas mentioned forensic odontology specifically. The term “forensic analysis” undoubtedly includes bite mark comparison, but no national accreditation body currently recognized under Texas law offers accreditation in bite mark comparison. The Commission also asked the Attorney General to provide an opinion regarding whether the Commission has the legal authority to withhold an accreditation exemption for a forensic discipline based on concerns regarding the integrity and reliability of the discipline.

On January 17, 2017 Attorney General Ken Paxton issued a response to the Commission's request. (See **Exhibit B**.) The Opinion (KP-0127) concluded the following:

1. Article 38.35 of the Texas Code of Criminal Procedure prevails over Rule 702 of the Texas Rules of Evidence to the extent the two may conflict.
2. Article 38.35 requires "forensic analysis" to be either accredited or exempt by the Commission.
3. The Commission has the discretion to withhold an exemption from the accreditation requirement pending resolution of concerns regarding the integrity and reliability of the forensic analysis.

¹⁰ *Id.* at 38.01 § 4-d(c).

¹¹ The Commission specifically used the term “bite mark comparison” to refer to the act of analyzing a patterned injury for purposes of either associating or excluding a suspect or group of suspects based on the observable characteristics of the patterned injury. The Commission had no objection to the components of bite mark analysis that include swabbing a patterned injury site for possible DNA analysis or to determine the presence or absence of salivary amylase.

Bite mark comparison is not an accredited discipline. Due to concerns expressed in February 2016 report, the Commission has not exempted bite mark comparison from the accreditation requirement though it has exempted other forensic odontology disciplines including human identification and age estimation.¹²

It is important to note that Attorney General Opinions do not carry the same weight as opinions issued by a court of law and thus an appellate court's interpretation of the statutory language could diverge from the Attorney General's Opinion. Interested parties should continue to monitor case law developments in this area.

C. HISTORY OF BITE MARK COMPARISON REVIEW TEAM

On February 12, 2016, the Texas Forensic Science Commission published a report in response to a complaint filed by the national Innocence Project on behalf of Steven Mark Chaney.¹³ By unanimous vote, the Commission made a number of recommendations in the report, including the development of a collaborative plan for retroactive bite mark comparison case review led by a multidisciplinary team of forensic odontologists and attorneys.

In the months following the report's release, the Commission worked with the American Board of Forensic Odontology (ABFO) and stakeholders in the legal community to form a bite mark comparison review team to conduct a retroactive review of cases. The team was structured in a similar manner to a previous team convened to conduct a review of Texas microscopic hair comparison cases, consisting of four subject matter experts, two defense attorneys and two prosecutors. On January 27, 2017, the team held its first meeting. The team also held subsequent

¹² TEX. ADMIN. CODE Title 37, Part 15, Ch. 651, subch. A, § 651.7(a)(9).

¹³ The Commission's report may be accessed at the following link: <http://www.fsc.texas.gov/blog/2016-04-18/fsc-releases-report-forensic-bitemark-comparison-complaint-filed-national-innocence>

meetings on March 10, 2017 and September 8, 2017. All meetings were open to the public. This report describes the team's work and conclusions for cases reviewed.

D. COMPOSITION OF BITE MARK COMPARISON CASE REVIEW TEAM

The following experts are members of the team. Each member's curriculum vitae is attached as **Exhibit C**.

- 1) Paula Brumit, DDS, ABFO Current President, Austin Road Dental Clinic, Graham, Texas
- 2) Adam Freeman, DDS, ABFO Recent Past President, Westport Dental Associates, Westport, Connecticut
- 3) William Lee Hon, Polk County Elected District Attorney
- 4) David Senn, DDS, Director of the Center for Education and Research in Forensics School of Dentistry, University of Texas Health Science Center at San Antonio
- 5) Bob Wicoff, Chief Appellate Division Harris County Public Defender's Office
- 6) Russell Wilson, Esq., Russell Wilson Law Office Dallas
- 7) Bill Wirskye, Assistant District Attorney, Collin County
- 8) Franklin Wright, DDS, Forest Hills Family Dentistry, Cincinnati, Ohio

E. PROCESS OF GATHERING CASES

Because there is no central repository of bite mark cases, compiling a comprehensive list of Texas bite mark cases was not an easy task. Additionally, because bite mark comparison is typically performed outside a crime laboratory setting by dentists in private practice, a multifaceted approach is necessary to identify potentially affected cases. Where forensic laboratories have LIMS systems which enable them to track and search for cases, bite mark comparison cases are typically performed by individual forensic odontologists who maintain their own case file tracking systems. Indeed, though Commission staff made a good faith effort to identify cases, there is no

way to guarantee that cases could not have been missed that the team would review if provided the opportunity.

Despite these challenges, staff had several helpful resources to consult at the outset of the project. First, staff referred to the list of Texas convictions referenced in the *Forensic Dentistry, Second Edition* textbook edited by Drs. Senn and Stimson. This textbook contains an appendix entitled “U.S. Federal and State Court Cases of Interest in Forensic Odontology,” that provides chronological case citations. After a close review, 22 Texas convictions were identified from the appendix.

In addition, the national Innocence Project also provided the Commission with a list of Texas bite mark comparison convictions of which they were aware. This list provided an additional six cases that were not listed in the *Forensic Dentistry* textbook.

In an attempt to fill any gaps left by the first two lists, staff generated a list of cases using a LexisNexis search. That search returned a total of 221 appellate decisions requiring a careful review to determine relevancy. Once this review was completed, an additional six cases were added to the master list.

In discussions with the American Board of Forensic Odontology (ABFO) leadership, staff learned that a handful of retired ABFO Diplomates had provided their personal case files to the archives at the National Museum of Health and Medicine (“NMHM”) in Silver Spring, Maryland. Staff contacted the museum for assistance in accessing information concerning Texas casework stored there. The Museum responded with short list providing very little information due to the limited nature of the archived information. The NMHM information added one potential additional case to the list but ultimately the archived files were too limited to provide for extensive case identification.

The Harris County District Attorney's Office Conviction Integrity Unit provided the Commission with an additional two cases to add to the review. An additional two cases were provided by Dr. Paula Brumit. Upon review, it was determined that comparisons were not ultimately made in those cases. The Tarrant County Medical Examiner's Office also provided a list of cases submitted by Dr. Roger Metcalf.

Ultimately, staff identified 36 cases were for initial screening by the team. (*See Exhibit D.*) The initial list of cases compiled through the process outlined above was shortened when review parameters are set and further scrutiny is applied to the case facts. Several cases were eliminated from the list at the outset because they did not involve an identification, or because the bite marks in question were inflicted by animals. It should also be noted that the list of 36 cases includes the Steven Mark Chaney case along with two cases where the defendants were later exonerated as a result of DNA evidence, as discussed below.

F. PROCESS OF OBTAINING TRIAL TRANSCRIPTS

Obtaining trial transcripts for post-conviction review can be difficult, especially for older cases. Obviously, the more recent a conviction the easier it is to obtain the transcript. Relatively recent convictions can often be obtained from the Courts of Appeals, the Court of Criminal Appeals or the State Archives. The Texas court system has a transcript retention policy that allows for the retention of records in felony convictions for a number of years depending on the severity of the charge(s). Some are retained indefinitely, namely capital convictions where the death penalty was imposed. Each Court of Appeals has its own policy concerning obtaining copies of transcripts which often makes for an uneven retrieval process. Records were obtained via compact disc from Courts of Appeals, hard copies from the State Archives, digital or paper copies from District Attorney offices, and finally a number were digitally scanned by Commission staff.

G. SUMMARY OF CRITERIA (SCREENING AND REVIEW)

As a threshold matter, it is critical to note that the review team's work was *limited to the review of testimony*. The team did not have access to the evidence in any case and thus did not make an assessment of the quality of the bite mark comparison performed. The team limited its analysis to whether the testimony was supportable or not. Team members with expertise in forensic odontology may consider future requests to review evidence such as photographs of injuries, molds, etc. (to the extent available) for individual cases upon the request of stakeholders.

The criteria for the transcript review were developed based on two main factors: (1) the Commission's previous experience in developing criteria for the microscopic hair comparison review; and (2) a common desire to ensure that any retroactive case review makes prudent and effective use of limited state resources. Thus, team members and Commissioners agreed to refrain from reviewing cases solely for the purpose of identifying overstatements in testimony regardless of whether there could be any conceivable argument that the erroneous bite mark testimony impacted the case outcome. Instead, team members focused resources solely on those cases for which the defendant could have a plausible argument that flawed bite mark comparison testimony may constitute grounds for legal relief. Of course, those who disagree with the Commission's decision to exclude their cases are free to pursue legal remedies through the court system.

Initial Screening Criteria

The first question answered by the team in approaching a given case was whether it contained a bite mark comparison that included a positive, probative association. The term is defined as follows:

The term "*positive, probative association*" means the expert expressed an association of any kind between the defendant's dentition and the patterned injury on human skin, and that association provided information, regardless of significance, about the suspect's connection to a criminal act.

If the answer to this question was "no," the team stopped the review. If the answer was "yes," the team proceeded to ask the following questions:

1. Was there a high-quality DNA profile or profile(s) connecting the Defendant to the crime?¹⁴
2. Were there multiple additional overwhelmingly inculpatory case facts in the form of physical evidence and/or witness testimony such that an alternative theory, explanation or suspect is not plausible?

It is important to note the team answered the second question affirmatively only when non-bite mark related case facts were abundantly clear and overwhelming. Members always erred on the side of including cases rather than excluding them.

Transcript Review Questions

If the review team answered "no" to the two preliminary screening criteria, members then proceeded to review the case transcript. After reading the transcript, the team answered the following questions:

1. Did the testimony contain a statement of identification?
2. Did the testimony assign probability or statistical weight?
3. Did the testimony contain any other potentially misleading statements or inferences?

If the answer to any of these questions was "yes," the panel recommended to the full Commission that notification be provided to the following potentially impacted individuals:

- Defendant and/or last known counsel;¹⁵
- Elected District Attorney for county in which case was prosecuted;
- Conviction Integrity Unit if one exists in jurisdiction;
- Court with original jurisdiction over trial;

¹⁴ By "high quality," we are referring to single source profile(s), a simple two-person mixture, or a mixture for which a major contributor may be deduced.

¹⁵ Cases in which defendant is deceased are included in final report.

- Texas publicly funded innocence clinics;
- President of ABFO;
- Forensic odontologist who provided testimony (unless deceased).

H. CASE REVIEW RESULTS

Commission staff identified 36 total cases for possible transcript review. Of these, six cases were prescreened out by the staff (three of the cases were *Washington, Williams* and *Chaney*; two cases had no bite mark testimony; one case was a 1954 robbery involving bite mark impressions in cheese (*Doyle v. State*, 159 Tex. Crim. 310, 263 S.W.2d 779 (1954)). The team screened the remaining 30 cases and removed another 21 from transcript review after analyzing the cases under the initial screening criteria. (See **Exhibit D**.) The team reviewed five transcripts at its March 10, 2017 meeting and recommended notification for four of the five cases. (See **Exhibit E** for notification letters and transcripts.) Of the cases for which notification was recommended, three resulted in the team answering all review questions affirmatively. The fourth case involved two experts providing testimony with the team answering all three review questions affirmatively for the first expert and only the first review question affirmatively for the second expert.

At its September 8, 2017 meeting, the team reviewed the remaining four transcripts and recommended notification for three cases. Of these three cases, one involved the team answering the first and third review questions affirmatively while the team answered all three review questions affirmatively in the other two cases. It is also important to note that one case involved the team answering all three review questions affirmatively for two witnesses.

I. DECEASED INDIVIDUALS AND INDIVIDUALS EXONERATED BY DNA

- 1) David Wayne Spence

David Wayne Spence's case is not new to the forensic odontology community and this is not the first time the bite mark evidence and/or related testimony has been reviewed by ABFO experts. Spence was executed in 1997 for the 1982 murders of three teenagers near Lake Waco in McLennan County, Texas. Forensic odontologist Dr. Homer Campbell identified Spence as having made several of the wounds on two of the victims. To make his determination, Dr. Campbell reviewed autopsy photos and compared the wounds to a dental mold taken of Spence's teeth. Based on this comparison Dr. Campbell concluded that Spence's teeth had made the marks, testifying that Spence was "the only individual" to a "reasonable medical and dental certainty" who could have made the bite marks in question. In 1993, Spence's appellate lawyers assembled a blind team of ABFO odontologists to perform a two-part review. First, to review the autopsy photos for marks and then to compare the marks with dental molds from Spence and four other individuals. While they could identify a few patterns that may have been indicators of human bite marks, the experts were unable to state much else about the evidence. None of the experts were able to "match" Spence's mold to the marks. Only one was able to "match"¹⁶ a mark to one of the molds but it was not Spence's.

The team reviewed Dr. Campbell's testimony and concurred with the ABFO panel's prior assessment that the testimony was unsupported. The team reviewed the transcripts of both of Spence's murder trials at their March 10, 2017 meeting. For each trial, the team answered all three review criteria questions affirmatively.

2) Calvin Washington and Joe Sydney Williams

¹⁶ See Commission's prior report for discussion regarding why the concept of "matching" human dentition to a patterned injury is scientifically unsupported: <http://www.fsc.texas.gov/blog/2016-04-18/fsc-releases-report-forensic-bitemark-comparison-complaint-filed-national-innocence>

Approximately a year after the Lake Waco murders occurred, David Spence's mother was sexually assaulted and murdered in her McLennan County home. Dr. Homer Campbell was again consulted and he determined that Spence's mother had been bitten and the bites were "consistent with" the dentition of Joe Williams. Based largely on this finding, both Williams and Washington were convicted of the rape and murder. In 2000, DNA testing was conducted on the vaginal and anal swabs from the victim and both Washington and Williams were excluded. Because both men were previously exonerated the team did not obtain or review the testimony from their convictions.

J. CONCLUDING COMMENTS

While Texas may be one of the first states to undertake a statewide review of bite mark comparison cases, it should not be the last. The Commission and review team encourage other jurisdictions to take a similar approach to conducting retroactive case reviews for the purpose of protecting against potential miscarriages of justice. No review process is perfect, and every state would need to consider the approach that makes most sense given the resources available. The Commission and review team would welcome the opportunity to assist other states interested in performing a similar review.

Finally, the Commission is grateful for the assistance of numerous individuals and organizations, including the members of the review team, the ABFO, the national Innocence Project, the Conviction Integrity Units of the District Attorney's Offices in Dallas, Tarrant and Harris counties, the National Museum of Health and Medicine, the Texas Court of Criminal Appeals and the Texas State Archives.

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