IN THE 138TH JUDICIAL DISTRICT COURT
OF CAMERON COUNTY, TEXAS

AND

IN THE COURT OF CRIMINAL APPEALS OF TEXAS
IN AUSTIN, TEXAS

EX PARTE MELISSA ELIZABETH LUCIO, APPLICANT.	§ § § § § § § § § §	CAUSE NO. 07-CR-00885 CAUSE NO. WR-72,702-____ DEATH PENALTY

FIRST SUBSEQUENT APPLICATION FOR WRIT OF HABEAS CORPUS FILED PURSUANT TO ARTICLE 11.071, § 5 OF THE TEXAS CODE OF CRIMINAL PROCEDURE

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EX PARTE MELISSA ELIZABETH LUCIO, APPLICANT.	§ § § § § § § § § §	CAUSE NO. _____ CASE INVOLVING THE DEATH PENALTY

FIRST SUBSEQUENT APPLICATION FOR WRIT OF HABEAS CORPUS FILED PURSUANT TO ARTICLE 11.071, § 5 OF THE TEXAS CODE OF CRIMINAL PROCEDURE

Applicant MELISSA ELIZABETH LUCIO seeks relief from her conviction and judgment imposing death in violation of the United States Constitution.

INTRODUCTION

Melissa Elizabeth Lucio files this application for writ of habeas corpus, seeking relief from her conviction and death sentence based on newly discovered evidence showing that Ms. Lucio is innocent of capital murder

and innocent of the death penalty. In fact, this new evidence shows that Ms. Lucio was convicted of a crime that *never occurred*.

Fifteen years ago, Ms. Lucio's two-year-old daughter Mariah died two days after an accidental fall down the stairs. That Ms. Lucio now finds herself convicted of murder and scheduled to be executed on April 27 is the consequence of what Fifth Circuit Judge Patrick Higginbotham described as a "systemic failure, producing a train of injustice … a prosecution shadowed by the federal conviction of the prosecuting DA, now serving a 13-year federal sentence for selling his office over a time-period in which this indictment was returned." Order Denying Mot. to Recall Mandate, *Lucio v. Lumpkin*, No. 16-70027 (5th Cir. Mar. 31, 2022). Ms. Lucio's application details that train of injustice, and the new evidence establishing her innocence and right to habeas relief for constitutional violations pursuant to article 11.071 of the Code of Criminal Procedure.

Ms. Lucio's conviction and sentence are the culmination of a horrific combination of investigative missteps and a prosecution untethered from the truth and built on false science. After Mariah's family found her unconscious and called 911, emergency responders at the scene immediately

treated Ms. Lucio with suspicion. When Ms. Lucio told them about Mariah's fall down the stairs a couple of days prior, emergency responder Randall Nester was dubious because the residence he responded to was only one story. He reported his suspicions to the police, but Nester didn't appreciate that Mariah had fallen down the stairs at *a different apartment* the family had just moved from—a second-floor apartment accessed by a steep, 14-step outdoor staircase.

This critical misunderstanding set in motion a presumption of Ms. Lucio's guilt and an investigation plagued by tunnel vision, where the investigators continually assumed the worst about Ms. Lucio without adequately exploring—or even considering—alternatives. Error compounded error: With suspicion cast based on this misunderstanding of where Mariah's fall occurred, first responders also misjudged Ms. Lucio's "demeanor." Without knowing that Ms. Lucio's responses to stressful situations were shaped by her own history of trauma and abuse, first responders immediately concluded that Ms. Lucio's reaction to Mariah's injuries suggested she had inflicted them.

Approximately two hours after Mariah died—and guided by unscientific determinations about the meaning of Ms. Lucio's behavior and demeanor at the scene—police began a coercive, guilt-presumptive interrogation. Gripped by shock and grief, Ms. Lucio was interrogated for more than five hours, late into the night, by five law enforcement officers. They shouted at Ms. Lucio; berated her as a neglectful mother; repeatedly showed her photos of her dead child; and implied that if she wasn't at fault, one of her other children or her husband would have to be. Ms. Lucio asserted her innocence *more than 100 times*,[1] but police refused to accept any response that was not an admission of guilt—suggesting to Ms. Lucio that the interrogation would not stop unless she told them what they wanted to hear. After hours of relentless, coercive questioning, Ms. Lucio acquiesced to the officers' demands, vaguely agreeing she was "responsible" for Mariah's injuries by regurgitating the words and facts that interrogators had fed to her.

With Ms. Lucio's coerced admission in hand, the State continued to run with its theory that a murder had occurred—no matter that even as

[1] During the interrogation, Ms. Lucio verbally asserted her innocence 86 times, and non-verbally asserted her innocence (by, e.g., shaking her head) 35 times.

Ms. Lucio was being interrogated, her older daughters were in the same police station giving officers and a CPS investigator statements that corroborated Ms. Lucio's account of Mariah's fall down the stairs and denied abuse. Those statements (and later statements from Mariah's other siblings) were suppressed, most only coming to light after Ms. Lucio's initial habeas application. The State's Medical Examiner, Norma Jean Farley, was influenced by the State's hypothesis of homicide and failed to investigate causes and contributions to Mariah's death that had nothing to do with intentional force. Dr. Farley failed to consider Mariah's medical history, which included trouble walking and documented falls, as well as a prior traumatic brain injury; information about Mariah's behavior in the days before she died, including excessive sleep and loss of appetite, which were consistent with head trauma after an accidental fall; or potential non-abuse causes for Mariah's injuries, including evidence that Mariah had a blood coagulation disorder that caused profuse bruising throughout the body.

Without forensic or eyewitness evidence to support a case for capital murder, the State's case at the liability phase was built upon Ms. Lucio's lengthy interrogation by law enforcement; unscientific and improper

analysis of Ms. Lucio's affect and demeanor following her daughter's death; and testimony from the State's pathologist claiming—contrary to the medical evidence—that Mariah's death had to have resulted from abuse.

But for the State's use of false testimony, however, no juror would have voted to convict Ms. Lucio of capital murder—because no murder occurred. In violation of Ms. Lucio's due process right, the State relied heavily on Dr. Farley's false and scientifically invalid testimony—namely, that Mariah's injuries must have occurred within twenty-four hours of her death and that marks on Mariah's body were adult-sized bite marks—to convict Ms. Lucio. But as this Application explains, Dr. Farley's testimony was completely false, contradicted both by science and by every contemporaneous eyewitness account. The State's reliance on testimony from a law enforcement officer that he could determine Ms. Lucio's guilt from her demeanor was equally unscientific; this Application explains that such testimony is wholly baseless. Because Ms. Lucio's conviction was based on this false and scientifically invalid evidence, and because the scientifically valid evidence shows there was no murder, she is entitled to a new trial.

In addition to the State's unconstitutional use of false evidence to procure Ms. Lucio's conviction, previously unavailable scientific evidence entitles her to relief and, taken together with all available evidence, demonstrates her actual innocence. Since Ms. Lucio's trial, scientific evidence has developed illustrating that (1) the "bite mark" evidence used to support the State's theory of abuse was scientifically invalid; (2) Dr. Farley's conclusions regarding Mariah's cause of death are undermined by forensic confirmation bias; (3) Ms. Lucio was uniquely susceptible to false confession due to her lifelong history of trauma; and (4) the State witness's purported ability to "read" Ms. Lucio's demeanor was scientifically invalid. Had this new scientific evidence—which undermines every aspect of the State's case—been presented at trial, Ms. Lucio would not have been convicted. Accordingly, as explained herein, Ms. Lucio is entitled to a new trial.

The grave errors that undermine the integrity of Ms. Lucio's conviction and warrant relief were not limited to the scientific (or pseudo-scientific) evidence presented in the State's guilt-stage presentation. In fact, additional constitutional errors are myriad, and they infected both the liability and penalty phase of Ms. Lucio's trial:

- Ms. Lucio's trial counsel provided constitutionally ineffective assistance by failing to rebut the false and misleading medical testimony offered by the State.

- The State violated Ms. Lucio's right to due process when it suppressed evidence favorable to her defense, both at the liability phase and at the penalty phase. The suppressed evidence shows that from the beginning, police and prosecutors were aware that witnesses confirmed Ms. Lucio's account of Mariah's death, and that eyewitnesses said Ms. Lucio had not abused Mariah or any of her children.

- The State violated Ms. Lucio's Sixth Amendment right to be free from uncounseled pre-trial interrogation when—nearly a year after she was arrested—the State used a CPS therapist to meet with and elicit information from Ms. Lucio. Portions of that therapist's reports were misleadingly used during cross-examination of defense witnesses, but the reports themselves—and the exculpatory information they contained—were not provided to the defense.

- Ms. Lucio's conviction and death sentence are tainted by juror misconduct, violating her Sixth Amendment right to a fair trial. One juror lied at voir dire about his ability be fair and consider a sentence less than death, and now explains: "I think every time someone is found guilty of murder they should be hung." Ex. 49 (Cruz Dec.). While the jury unanimously answered "yes" in response to the issue of whether Ms. Lucio would present a future danger, several jurors now report that "[t]he jury did not think Melissa was a future danger and we did not consider that when sentencing her to death." *See, e.g.*, Ex. 56 (Saldivar Dec.).

- Gender bias tainted both Ms. Lucio's conviction and her death sentence. From the start, police and prosecutors fixated on Ms. Lucio's supposed deviation from gender stereotypes—attributing responsibility to her but not her male partner, even though both had caretaking responsibilities for Mariah, and focusing on Ms. Lucio's "demeanor" and purported failure to show the sort of emotion they expected. At the penalty phase, the State repeatedly deployed gender

stereotypes, including by improperly focusing its future dangerousness argument on Ms. Lucio's biological capacity to become pregnant while incarcerated. Weaponizing Ms. Lucio's gender against her in this manner was patently unconstitutional.

- Ms. Lucio is innocent of the death penalty because the State's penalty-stage case rested on false and misleading testimony and the issue of "future dangerousness" posed to the jury under Tex. Code Crim. Proc. art. 37.071 § 2(b)(1) is unconstitutionally vague.

Each of the errors discussed in this application independently amounts to a grave miscarriage of justice. Taken together, they render Ms. Lucio's conviction and sentence unconscionable; there can be no doubt that Ms. Lucio is entitled to relief. Ms. Lucio asks the Court of Criminal Appeals to authorize the trial court's review of this Application under §§ 5(a)(1)-(3) of Article 11.071, and then to vacate her conviction. At a minimum, Ms. Lucio's April 27, 2022 execution should be stayed.

STATEMENT OF THE CASE

I. STATEMENT OF THE FACTS

A. Ms. Lucio's Background

Melissa Lucio was born in Lubbock, Texas on June 18, 1969. Her life was marked by violence and abuse from the beginning. As a small child, she bore witness as her mother was repeatedly beaten and abused by her intimate partners. *See* Ex. 14 at 3 (Brand Dec.). One of her mother's partners began to sexually assault Ms. Lucio when she was only

six years old, and the abuse lasted for years. Other men victimized Ms. Lucio as well, including an uncle. *Id.* at 3-5.

Hoping to escape her circumstances, Ms. Lucio became a child bride at age sixteen. *Id.* at 5. Yet, Ms. Lucio's childhood sexual abuse made her vulnerable to repeated re-victimization, and her intimate partners beat her, humiliated her, raped her, and threatened to kill her. *Id.* at 6-8. When Ms. Lucio was still only sixteen, her husband's sister introduced her to cocaine, leading to many years of struggle with a substance abuse disorder. *Id.*

Ms. Lucio found solace in motherhood, and bore five children by the time she was twenty-three. After her husband abandoned the family, leaving Ms. Lucio vulnerable and struggling to support her children, she entered a new relationship with Robert Alvarez and gave birth to seven more children—including her youngest, Mariah. *Id.* at 7.

Mr. Alvarez, too, was violent towards Ms. Lucio. *See, e.g.*, Ex. 57 (Mar. 18, 2022 John Lucio Dec.); Def. Tr. Ex. 14 at 6; 37 RR 205; Def. Tr. Ex. 14 at 2-3; *See* Ex. 14 at 7 (Brand Dec.). Although Ms. Lucio's abuse was witnessed and reported by others, no one took action to ensure Ms.

Lucio's safety or even to refer her to available support services for battered women. *Id.* at 8-9.

Ms. Lucio's early and pervasive experiences of abuse caused lasting psychological harm, including post-traumatic stress disorder ("PTSD"), depression, and "battered woman syndrome." Ex. 51 at 10 (Pinkerman Assessment); Ex. 52 at 2 (Pinkerman Aff.). Like many individuals who have experienced prior trauma, Ms. Lucio responds to intensely painful or stressful situations by turning inwards and becoming passive, including displaying a flat affect. Ex. 51 at 7-8 (Pinkerman Assessment), Ex. 52 at 2 (Pinkerman Aff.).

B. Mariah's Tragic Death

1. The events preceding Mariah's fall

The chain of events that culminated in Mariah's death on February 15, 2007 began many years prior. As documented in over 1,000 pages of Child Protective Services ("CPS") reports, Ms. Lucio loved her children deeply, but struggled to care for them. The reports tell a story of profound poverty, including inadequate food, lack of electricity and water, insufficient supervision, and periodic homelessness. Def. Tr. Ex. 14 at 6; 37 RR 178, 181. Significantly, the reports demonstrate that Ms. Lucio *was never*

violent, and none of the children ever reported physical abuse by Ms. Lucio. From 1994 to 2007, the family moved twenty-six times, primarily because they were unable to pay rent. It was in the midst of one such housing crisis, during one of the family's moves, that Mariah's tragic accident took place.

2. Mariah's accident

On February 15, 2007, Ms. Lucio and her nine children living with her at the time—Mariah, age 2; Sara, age 3, Adriana, age 4; Gabriel, age 6; Bobby, age 7; Richard, age 9; Rene, age 9; Selina, age 14; and Alexandra, age 15—were preparing to move from their second-story apartment to a new home. Ms. Lucio had slept little; she had spent the previous day going to the laundromat, washing and folding clothes, packing dishes in boxes, and preparing the children for their next move. Ms. Lucio helped some of the children get ready for school, and others ran outside to play while she focused on packing. Mariah and Alexandra stayed inside with her. At some point, Mariah managed to open the unlocked screen door to the set of dilapidated stairs outside.

When Ms. Lucio noticed that Mariah was not in the apartment, she ran outside in a panic and saw Mariah at the bottom of the stairs, crying.

Ms. Lucio had not seen Mariah fall, and was not sure whether she fell all or part of the way down the stairs. Mariah had struggled with illness and developmental delays since birth. CPS records reflect that Mariah had trouble walking, and even after she was prescribed orthopedic shoes for a turned-in foot, she fell repeatedly. *See* Ex. 58 (CPS Records Summary). After one of her falls at a daycare program, she lost consciousness and incurred a traumatic brain injury. *See id.* On the day of the fall down the stairs, Ms. Lucio gave thanks that Mariah did not appear to be seriously injured: she was bleeding from where her bottom tooth cut into her lip, but Ms. Lucio did not see any other injuries. Tragically, Mariah had in fact suffered internal injuries, and would deteriorate over the next two days, leading to her death.

By February 17, Mariah was congested, had been sleeping excessively, and refused to eat. For two days, Mr. Alvarez and Ms. Lucio had moved their belongings, the children's toys, their remaining food, the family's clothes, linens, dishes, and furniture to their new apartment. On the 17th, the family continued to get settled; Mariah remained listless and sleepy. Ms. Lucio put Mariah down for a nap, then turned her attention to a pile of children's clothes that needed folding.

A short while later, Ms. Lucio's world fell apart. Mariah wasn't breathing. The family frantically called 911. Paramedics arrived and tried, unsuccessfully, to resuscitate Mariah. When they arrived at the hospital, doctors pronounced her dead.

C. The Biased Investigation

Authorities immediately targeted Ms. Lucio in a biased investigation. Though Ms. Lucio told emergency responders that Mariah had fallen down the stairs days earlier, emergency responder Randall Nester was dubious because the residence he responded to "was a single-story," and he "report[ed] that to the police department when they arrived." 33 RR 87. Nester didn't appreciate that Mariah had fallen down the stairs at the second-floor apartment the family had just moved from. Having already presumed Ms. Lucio's guilt based on this misunderstanding, police proceeded with an hours-long, coercive, "guilt presumptive interrogation" of Ms. Lucio. Ex. 11 at 3-4 (Thompson Report). After asserting her innocence more than 100 times, Ms. Lucio finally acquiesced by vaguely agreeing she was "responsible" for Mariah's injuries. Experts confirm that Ms. Lucio "was relentlessly pressured and extensively manipulated" throughout the many hours of interrogation. Ex. 10 at 15

(Gudjonsson Report); *see also* Ex. 11 at 4 (Thompson Report). The "interrogators' guilt presumptive endeavors, techniques, and manipulative ploys, involved two main objectives: (a) To break down Ms. Lucio's persistent denials and resistance; and (b) increase[] her willingness to make incriminating admissions . . . ." Ex. 10 at 6 (Gudjonsson Report). As recent clinical testing has made clear, Ms. Lucio was particularly susceptible to these techniques in light of her "highly abnormal" levels of vulnerability to coercion, stemming from her trauma history and other risk factors such as a low IQ. *Id.* at 1, 12.

In stark contrast to their conduct toward Ms. Lucio, investigators expressed sympathy for Mr. Alvarez's loss and, generally, spoke to him with respect—notwithstanding that Mr. Alvarez was also home on the day of Mariah's death, and even though only he, not Ms. Lucio, had a documented history of violence against his family. *See* Ex. 14 at 7-8 (Brand Dec.) (describing Mr. Alvarez's history of violence against Ms. Lucio). Mr. Alvarez was ultimately prosecuted only for "causing injury to a child by omission," and received a four-year sentence. Ex. 29 at 34 (Robert Alvarez Sentencing Tr.).

The State's Medical Examiner, Norma Jean Farley, was influenced

by the State's hypothesis of homicide. Consistent with new science regarding the impact of biasing information on pathologists' processes and conclusions, *see infra* Claim 2, Dr. Farley failed to consider evidence supporting causes of Mariah's injuries that have nothing to do with abuse. As described below, the State would later rely on Dr. Farley's false and scientifically invalid testimony—namely, that Mariah's injuries must have been caused by intentional force within twenty-four hours of her death and that marks on Mariah's body were human bite marks—to convict Ms. Lucio.

II. PROCEDURAL HISTORY

A. Ms. Lucio's Trial & Direct Appeal

The State charged Ms. Lucio with capital murder, *see* Tex. Penal Code §§ 19.02(b)(1), 19.03(a)(8), for "intentionally and knowingly" causing Mariah's death by "striking, shaking, or throwing [Mariah] with [her] hand or foot or other object." 1 CR 9. Her trial began on June 30, 2008.

1. The State's case

Having no forensic or eyewitness evidence to support a case for capital murder against Ms. Lucio, the State's case at the liability phase was built upon Ms. Lucio's lengthy interrogation by law enforcement, unsci-

entific and improper analysis of Ms. Lucio's affect and demeanor following her daughter's death, and false testimony from the State's pathologist claiming—contrary to the medical evidence—that Mariah's death had to have resulted from abuse.

Harlingen Police Department ("HPD") Detective Rebecca Cruz testified that Ms. Lucio's interrogation, by four investigators and subsequently Texas Ranger Victor Escalon took place over "approximately five and a half to six hours." 32 RR 33. Cruz testified that the interrogation was recorded, and although there were breaks in the recording, she was not aware of anything "unusual or extraordinary" that happened when the camera was off. 32 RR 34. Ms. Lucio's defense attorney did not ask Detective Cruz any questions on cross-examination regarding this unexplained, lengthy break in the recording of the interrogation which, today, would render Ms. Lucio's custodial statements inadmissible in the prosecution's case against her.[2]

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[2] *See Flores v. State*, No. PD-1189-15, 2018 WL 2327162, at *1 (Tex. Crim. App. May 23, 2018) (unpublished) (finding that confession evidence was inadmissible because the recordings were "an inaccurate representation of the conversation between the peace officers and appellant due to the absence of over thirty minutes of the interview[,]" in violation of Tex. Code Crim. Proc. art. 38.22; art. 2.32).

The State moved, over defense counsel's objection,[3] to introduce three DVDs which contained recordings of Ms. Lucio's interrogation. 32 RR 54. Ms. Lucio's defense attorney never moved to suppress her statements so, for the first time, and after viewing less than three minutes of the interrogation video (outside the jury's presence), the court determined that "[Ms. Lucio] understood her rights and that it was voluntary." 32 RR 52. The court explained to defense counsel, "unless you have any evidence to show duress, or anything like that, I'm going to allow it to be played to the jury." *Id*. Defense counsel offered nothing, despite significant evidence that her statement was involuntarily coerced, *see* Ex. 10 at 16 (Gudjonsson Report) (describing the most incriminating aspects of the interrogation as a "coercive process"). When the jury returned, the three discs (St. Exs. 3-5) were admitted into evidence, and all three discs were played for the jury. 32 RR 53-56, 66-68 (Disc 1); 32 RR 90 (Disc 2); 33 RR 4-5 (Disc 3).

[3] Ms. Lucio's defense counsel objected, but only on the grounds that because all the voices in the recordings could not be verified, the recordings did not comply with a Texas statute and were therefore inadmissible. 32 RR 48-50. The trial court stated that its "main concern [was] whether or not the recording in and of itself shows that it's voluntary," and then, if it is, "the other concern is whether or not the voices can be identified." 32 RR 50.

Detective Cruz told the jury that she attended the autopsy the day after the interrogation and then followed up with CPS "to see if the children had many outcries of physical abuse." 32 RR 41. She did not say what the result of that inquiry was, but we know today that there was no evidence in any of the State records that any of Ms. Lucio's children had ever accused her of physical abuse; to the contrary, Ms. Lucio's children had affirmatively reported there was never any abuse by their mother. 35 RR 182; Ex. 20 at 90-92 (Arreola Report). Detective Cruz told the jury that the night of Mariah's death, the (three younger children were taken to Maggie's House, the Cameron County Children's Advocacy Center, "to be interviewed by forensics," and that two older children (Alexandra and Daniella Lucio) had come to the station to provide statements. 33 RR 39. Detective Cruz testified that she did not recall taking the statements from Alexandra and Daniella, but statements were "submitted for the case file." *Id*. As for the three children interviewed at Maggie's house, Detective Cruz said she never got a copy of the interviews. 33 RR 41. She said that the only information she received concerning the Maggie's House interviews was "over the phone," which included "the name and date, time and birth of the three children and whether or not they made

a outcry of physical abuse or drug abuse." *Id.* Detective Cruz told the jury that none of the three children interviewed at Maggie's House made any such outcries.[4] 33 RR 42. Detective Cruz did not tell the jury that one of the children interviewed at Maggie's house, Rene, reported that he had witnessed Mariah fall down steps two days before her death. 2 WCR 343-45.

Detective Cruz testified that she "investigate[d] an allegation that the child had fallen on some steps," because there were "inconsistencies" and "that was the initial story that the child had fallen." 32 RR 43. While she did not measure the incline of the stairs, Detective Cruz described the stairs as "pretty steep," with varying distances between the steps. 33 RR 20-21. As a result, the stairs were "difficult to go up and down on." 33 RR 21. As part of her investigation, Cruz executed search warrants at Ms. Lucio's residence to look for "[a]ny kind of evidence of maybe of abuse—and kind of signs," but found nothing "pertinent." 33 RR 21.

When she "first got involved in the case," which was the night Mariah died, and before the autopsy or any investigation was conducted,

[4] To identify the three children interviewed, Detective Cruz referred to a copy of an "investigative report." 33 RR 42.

Detective Cruz testified that she already believed that "this child didn't die from natural causes. This child was killed." 33 RR 51. *Id.* Detective Cruz told the jury that because she "believed that Melissa Lucio had caused the death of the child," she arrested her. 33 RR 53. Detective Cruz later conceded that there was no direct evidence that Ms. Lucio killed Mariah and that the arrest warrant "was ascertained due to circumstantial factors." 33 RR 56.

Dr. Alfredo Vargas, an emergency room doctor present when Mariah was brought to the hospital the night of her death,[5] told the jury that he performed a "physical inspection" of the deceased child and concluded that she had been dehydrated and had multiple bruises all over her. 32 RR 75-76. Despite no apparent knowledge of Mariah's relevant medical history and his concession that he had not discussed the cause of death determination with the pathologist,[6] Dr. Vargas declared, in 30 years, "this is the absolute worst that I've ever seen." *Id.* In testimony that

[5] Dr. Harry Davis was the attending physician at Valley Baptist Medical Center responsible for Mariah's treatment; he pronounced her death. Dr. Davis was not called as a State's witness, and expressed doubt over the finding of abuse in light of Mariah's extreme temperature following death, which indicated she was battling an infection. *See* Ex. 7 (Davis Dec.).

[6] Dr. Vargas testified that he had not spoken "at all" to the pathologist who conducted Mariah's autopsy, Dr. Farley. 32 RR 87.

contradicts scientific consensus regarding the limited ability of doctors to determine the age of bruises, *see infra* n.23, Dr. Vargas gave his "medical opinion" that all of the bruising, contusions, and abrasions "would have been there prior to EMS getting involved." 32 RR 86-87. Dr. Vargas acknowledged that when he examined Mariah, the police were there already, and that he had spoken to a male officer about what happened. 32 RR 82-83.

Multiple witnesses offered their "opinions" as to the meaning of Ms. Lucio's demeanor following her daughter's death. As discussed *infra*, new scientific consensus reveals that there is no reliable way to draw such opinions based on a person's demeanor or facial cues, *see* Ex. 9 (Barrett Dec.), Ex. 13 (Faigman Dec.). For example, Officer Robert Mendiola testified that Ms. Lucio was not crying when he responded to the home and did not "appear to be distraught, or concerned about her child." *Id*. Randall Nester, a paramedic, testified that Ms. Lucio also told him that Mariah had fallen down the stairs. 33 RR 87. He thought it was odd because the apartment only had about three steps in the front—misunderstanding that Ms. Lucio was referring to the outdoor staircase at their previous home. *Id*. He reported that (incorrect) information to the police

when they arrived. *Id.* He then also opined that "the mother was not—wasn't even within arm's reach of the child much less trying to grasp, hold her, or trying to do anything to hold [her]." 33 RR 92. He described to the jury that Ms. Lucio "wasn't really crying or showing a whole lot of emotion." *Id.* Although not offered as an expert witness, and without any knowledge of Ms. Lucio's significant history of trauma that impacted her response to her daughter's death, *see* Ex. 14 (Brand Dec.), he offered his opinion that Ms. Lucio was not acting as a mother should. 33 RR 93.

Texas Ranger Escalon told the jury he could discern Ms. Lucio's "guilt" from her body language and reactions.[7] When Ranger Escalon arrived at the police station, his role was to assist in the "interview" of Ms. Lucio. 33 RR 110-11. He said he never went to the crime scene, and his role at the time "would be limited to dealings with the suspect." 33 RR 111. After speaking to Detective Cruz when he first arrived, his understanding of the "offense" was that "it was a two year old little girl that was badly beaten and died due to her injuries." *Id.* Escalon said he did not review any reports or paperwork before he interviewed Ms. Lucio but

[7] Cameron County District Attorney (and future federal convict) Armando Villalobos conducted the direct examination of Ranger Escalon.

was "briefed by the police department. . . what they'd been dealing with the mother—you know—CPS was involved, and this child was taken away." *Id.* He also said he was provided photos of "Mariah laying naked with her injuries, showing her injuries to me." 33 RR 113. Having been "armed" with the photos and the limited information he received from HPD, Escalon went to interrogate Ms. Lucio, "the suspect." *Id.*

Escalon told the jury that when he first entered the interview room, he "sat in and observed [Ms. Lucio's] demeanor." *Id.* Escalon said she was not making eye contact with the investigator and had her head down. He told the jury, "[s]o right there and then, I knew she did something. And she was ashamed of what she did, and she had a hard time admitting . . . what had occurred." 33 RR 115. Escalon said he "knew she was beat . . . she was giving up." *Id.* According to Ranger Escalon, Ms. Lucio's "slouched appearance" said: "I did it. I've given up." *Id.* Based on his "experience," Escalon told the jury that when someone has their head down, and their shoulders slouched, and they won't look at you, "[t]hey're hiding—hiding the truth." 33 RR 116. Someone who is being "honest," according to Escalon, will get upset, tell you "get out of my face. I didn't do anything. Leave me alone. I want my attorney." *Id.* The difference,

he said, is "black and white." *Id.* This testimony, *discussed infra*, is contrary to science and patently false.

Escalon stated that his goal was to have Ms. Lucio tell him the truth, which, according to him, meant that the goal was for Ms. Lucio "to admit what she did." *Id.* He believed the little girl was "badly beaten," and thus the goal of his interrogation was for Ms. Lucio "to take responsibility for what she did, and explain to [him] everything she did, how she hit this little girl, and how she grabbed this little girl." 33 RR 118-19.

Ranger Escalon said that it took about twenty minutes for Ms. Lucio "to open up with" him. 33 RR 121. He offered his "opinion" that Ms. Lucio's verbal responses were "clear" as to what occurred, but there was "just that little piece missing" that he needed. 33 RR 124. That was why he had Ms. Lucio demonstrate hitting a child with a doll. *Id.* He also claimed he took Ms. Lucio's DNA for marks on Mariah's body postulated to be "the bite marks," to see if he could obtain evidence "to link [Ms. Lucio] back to Mariah[,]" *id.*—testing that was never conducted.

Detective Javier Villareal testified that he heard Ms. Lucio make a phone call the day after Mariah's death; Ms. Lucio sounded "agitated," and was saying: "Don't blame, Robert. This was me. I did it. So don't

blame Robert." 33 RR 154. Villarreal admitted that he did not document this purported statement in any report until just weeks before the trial started, on June 4, 2008, *almost sixteen months after it allegedly occurred*. 33 RR 151. There is no audio recording of this (equivocal, family-protective) statement, nor any contemporaneous record of it being made, and Cruz, who was seated directly next to Ms. Lucio in the vehicle at the time, did not testify that Ms. Lucio made this statement.

The State then called an employee from CPS who appeared with her own counsel and who had entered into an immunity agreement with the State, to receive transactional immunity for "anything involving the death of Mariah Alvarez." 33 RR 161-62. Joanne Estrada, a CPS conservatorship worker, testified as to the processes and procedures of CPS related to the investigation and removal of children from the custody of their parents. 33 RR 165-67. Ms. Estrada explained that she first got involved in Ms. Lucio's case in October 2007. 33 RR 168. She testified that Ms. Lucio's case was the only one she ever had that involved a parent with more than seven children. 33 RR 174. Ms. Estrada told the jury that on February 17, 2007, "immediately" upon the death of Mariah, an

investigation was opened, and Ms. Lucio's children were removed and placed in foster care. 33 RR 177.

Ms. Estrada also testified about a therapist, Beto Juarez, who met with Ms. Lucio while she was being held in the county jail. 33 RR 190-91. According to Ms. Estrada, Juarez was counseling Ms. Lucio as part of "court order services." *Id*. Ms. Estrada did not know why Ms. Lucio would be receiving court ordered services through CPS, including a therapist, when the agency was trying to terminate Ms. Lucio's parental rights at the same time. 33 RR 191.

The State's final witness was Dr. Norma Jean Farley, then chief forensic pathologist for Cameron and Hidalgo Counties, who performed the autopsy on Mariah. 34 RR 5, 10. As explained in Claim 1 *infra*, Dr. Farley's testimony regarding her autopsy findings was unscientific and false. Dr. Farley began by stating that the "child was severely abused." 34 RR 11. The State then introduced over a dozen autopsy photographs, 34 RR 13, which were published to the jury, 34 RR 21. Dr. Farley told the jury that Mariah had "bite marks" on her left upper arm and more on her back, which were "obvious." 34 RR 15. She said the "bite marks" were the result of "dragging the teeth across the back," and that one was

a "bite with raking, where it just pulls the flesh off the back." 34 RR 17. She described the mark for the jury as a "big bite!" *Id.* The bite mark that was caused by dragging, Dr. Farley said, looked like an adult bite. 34 RR 33. According to Dr. Farley, the bruises and abrasions on Mariah's body were "a significant sign of abuse." 34 RR 26. The injuries that Mariah had were not in "the typical places" where people fall. *Id.* She informed the jury that "all of these bruises are consistent with somebody being hit, or being slammed into something." 34 RR 17. Dr. Farley gave her opinion as to the cause of Mariah's death, testifying that "most of the injuries were to the head" which she called blunt force trauma and described as injuries to the brain. 34 RR 22. She said she "[knew] that there was significant head blow trauma which just means that the child has been beat about the head, or thrown into something." 34 RR 23. She told the jury, the "form and manner of death" was "homicide." 34 RR 24.

Dr. Farley testified that Mariah had a fracture to her left arm that was healing and would have occurred "in the seven day to two week period." 34 RR 29. She said this break "just gives us more evidence of a battered child syndrome." *Id.; see also* 34 RR 58 (testifying that the fracture was a "sign of previous abuse"). She later said that the fracture

could have occurred a week or two prior. 34 RR 30. The fracture Mariah suffered, according to Dr. Farley, was from tugging or twisting the arm. *Id.* She said that the fracture would have caused Mariah to complain about the pain. *Id.*

Dr. Farley explained that "this is a child that's been beaten. This is a battered child." *Id.* In fact, she told the jury emphatically yet, falsely, that Mariah's bruises *could not* have resulted from falling down the stairs; they "came from a beating." 34 RR 56. Dr. Farley discussed internal injuries to Mariah, which she said would have been caused by a force from "punches, or stomps—or slams." 34 RR 29. As for the injuries to Mariah's head, Dr. Farley told the jury that they had would have occurred "within 24 hours" of her death, 34 RR 35. Dr. Farley's testimony concluded with her reiterating to the jury that "the blow to the head that caused the death of Mariah Alvarez, happened within 24 hours of her death." 34 RR 59. And, that the trauma came from being struck all over the body—head, torso, extremities, or being thrown, slammed, stomped. A beating." *Id.*

2. The defense's case[8]

The defense ultimately called three witnesses at the liability phase of the trial.[9] The first, Dr. Jose Kuri, was a neurosurgeon—not a licensed pathologist. 35 RR 4. Ms. Lucio's defense counsel stated his testimony was proffered to deal "only [] with the brain injuries of [Mariah]." 35 RR 9. Dr. Kuri agreed with Dr. Farley's cause of death being "blunt force trauma to the head," 35 RR 24-25, and stated that such trauma could result from falling down the stairs. 35 RR 34. Dr. Kuri was not permitted to testify—and did not have the relevant expertise—about any of Mariah's bodily injuries, which were so central to Dr. Farley's claim that Mariah had to have been abused.[10]

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[8] Not long after Ms. Lucio's trial, her defense attorney, Mr. Gilman, accepted a job offer from the very same person who had led Ms. Lucio's prosecution, District Attorney Villalobos. Since October 19, 2009, Mr. Gilman has worked at the Cameron County District Attorney's Office and, on information and belief, today serves as the third highest-ranking assistant to District Attorney Luis V. Saenz. *See* Defendant's Motion to Disqualify the Cameron County District Attorney, Cause No. 07-cr-0885 (138th Dist. Ct., Cameron Cnty., Feb. 18, 2022), at 3.

[9] Two defense witnesses were precluded from testifying at this phase of the trial.

[10] In addition to not being a pathologist who could testify holistically about Mariah's injuries and cause of death, Dr. Kuri was hard of hearing and could not hear the questions being asked of him, nor could he describe even his own training and qualifications cogently. *See* 35 RR 21, 47-48.

Next, the defense called Sonia Chavez, Ms. Lucio's younger sister. 35 RR 94. Ms. Chavez said that her sister, Ms. Lucio, "never disciplined her children" *id*., and that she never knew Ms. Lucio to be an aggressive person, 35 RR 96. Ms. Chavez stated that she did receive a phone call from Ms. Lucio after her arrest but that Ms. Lucio never said, "[i]t wasn't Robert that did it, it was me that did it" as Detective Villarreal had claimed for the first time just before trial. 35 RR 97. Ms. Chavez said that from the time Mariah was returned to Ms. Lucio until her death, she never saw any signs of physical abuse of Mariah. 35 RR 106. Following the testimony of Ms. Chavez, defense counsel attempted to call Norma Villanueva, a social worker, who was going to talk about Ms. Lucio's history of trauma and its bearing on her demeanor and responses during the interrogation. 35 RR 122. The trial court said it was "having a hard time understanding how [her testimony] affects the case in chief as to guilt or innocence." 35 RR 122-23. The court interjected by saying that, perhaps if the defense had a psychologist, "that may or may not be appropriate." *Id*. After a brief hearing on Ms. Villanueva's qualifications and proffered testimony, 35 RR 129-35, the trial court found her not qualified to offer the proposed testimony. 35 RR 136. Defense counsel noted the State's

use of Ranger Escalon to offer his opinion on Ms. Lucio during her interrogation, but the trial court was unmoved, concluding that, as a "social worker," Ms. Villanueva was not qualified to offer her testimony.[11] 35 RR 136-37.

Because Ms. Villanueva's proffered (but precluded) testimony was based on her review of CPS records, the defense sought to introduce those records. 35 RR 138. To do so, the defense re-called Ms. Joanne Estrada from CPS. 35 RR 154. Ms. Estrada testified that a therapist named Beto Juarez had been performing counseling sessions with Ms. Lucio while Ms. Lucio was being held in the county jail. 35 RR 155. She said the counseling was pursuant to a CPS court order, but she could not remember who had requested the counseling services. 35 RR 155-56. Beto Juarez was a therapist who worked under contracted services with CPS, and his role was "related to the removal of the children and any area in general that they feel is needed." 35 RR 156. Ms. Estrada said that Juarez visited with Ms. Lucio at least three times, the last being in May or June of 2008. 35 RR 157. Ms. Estrada testified that she had access to the CPS

[11] Defense counsel then presented a "bill of particulars" regarding Ms. Villanueva's proffered testimony, on the record, but with the trial judge and the jury absent. 35 RR 141-43.

records regarding Ms. Lucio, and had seen no evidence in Ms. Lucio's CPS records that showed Ms. Lucio was physically abusive to any of her children. 35 RR 182.

Finally, the defense attempted to call Dr. John Pinkerman, a psychologist who would testify, in part, that Ms. Lucio "has all the signs of being a battered woman, she takes the blame for everything that goes on in the family." 35 RR 187. Defense counsel also explained to the trial court that Dr. Pinkerman would testify that, "if dealing with a male figure such as a husband she doesn't find fault with anything that a husband does, she takes the blame for it. She takes the blame for everything that goes on in the family." *Id*. Counsel further explained that the "video statement goes hand and glove with the battered woman syndrome. She shows all the signs in that video statement of being a battered woman." 35 RR 188. The trial court did not find Dr. Pinkerman's proffered testimony "appropriate" for the liability phase of the trial and precluded him from testifying. 35 RR 187-88.

3. The death sentence

At the penalty phase, the State's case centered on testimony that Ms. Lucio was likely to commit acts of violence in prison, that she had a

conviction for Driving While Intoxicated, and that she failed to cry or scream after she was convicted of capital murder—evidence which, according to the State, demonstrated that she lacked remorse. Because Ms. Lucio had no criminal record or history of violence, the State also recalled the medical examiner to testify anew about Mariah's injuries.

The State's first witness was A.P. Merillat, who, without objection from the defense, testified as an expert in "opportunities for future violence in the prison." 37 RR 24. Merillat told the jury he was a criminal investigator for the State of Texas Special Prosecution Unit, whose primary responsibility was to prosecute crimes that involve the Texas prison system. 37 RR 11-12. Merillat said he had testified in "numerous capital murder cases," and that he had been qualified to testify as a fingerprint expert, a blood stain expert, and a child sex abuse expert. 37 RR 13. He later added that he had been "qualified as an expert on prison violence and the opportunity to be violent in the penitentiary." 37 RR 24. Merillat assured the jury that he intended to inform them "what the opportunities are in the prison system, and this important decision that you have to make, you have to base it upon the truth that I intend to give you." 37 RR 17. He then described the "classification" system within TDCJ, and

explained that someone who was convicted of capital murder, but given a life sentence, would enter the Texas prison system with the same privileges as someone convicted of a non-capital crime who received a sentence of 50 years or more. 37 RR 18-19. He testified that those individuals could live in general population, work, go to school, go to visitation, go to church, and walk to and from their cells without an escort or handcuffs." 37 RR 18. He stated that a capital murderer with a life sentence might have a cell mate that was a "lesser convict," like a burglar. *Id*.

When asked if he was familiar with the number of assaults that occurred within TDCJ for the year 2007, Merillat told the jury there were 20,000 assaults by inmates upon either staff, or each other in 2007. 37 RR 19. He stated that there had been nine prison murders in one year and told the jury that he was currently working on a case "where a convicted murderer killed her cell mate last year." 37 RR 19-20. As for murders committed by inmates on TDCJ staff, Merillat told the jury that since 1984, there had been "four or five," which he said included male and female inmates. 37 RR 20. Merillat refused to concede that there were differences between male and female inmate prison violence. 37 RR 22-23. When asked about the numbers of assaults and similar behavior for

female inmates compared to male inmates, Merillat said that because there were fewer females in the prison system, the numbers for assaultive behavior and weapons possession offenses were lower. 37 RR 23.

The State then called CPS worker Joanne Estrada. 37 RR 41. The prosecutor walked Ms. Estrada through Ms. Lucio's prior involvement with CPS. 37 RR 42-67. On cross-examination, Ms. Estrada admitted that in all the years of CPS involvement with Ms. Lucio, Mr. Alvarez and their children, no records showed that Ms. Lucio had abused any of her children. 37 RR 69. She also stated that she had been given a grant of immunity for her testimony, and had been advised to retain counsel because of a pending criminal investigation. 37 RR 69.

Next, the State called the custodian of records for the Cameron County Jail, Wendy Anaya. 37 RR 87. Over the objection of defense counsel (who had not received notice of the witness until that morning), the State introduced records for Ms. Lucio that included "disciplinary reports or any incidents" related to Ms. Lucio's history while at the county jail. 37 RR 88-90.

The State also presented testimony from Mariah's foster parent, Alfonsa Castillo. 37 RR 93. Ms. Castillo testified that when she would take

Mariah for "family visits" with Ms. Lucio, she noticed that "they don't put too much attention to her." 37 RR 99. Ms. Castillo also told the jury that Mariah was eventually removed from her home because another child Ms. Castillo was caring for at the time died while in her care. 37 RR 103.

Over another objection from defense counsel, the State called an unnoticed witness, Carlos Borrego, a disciplinary officer from the county jail. 37 RR 114. Borrego testified that an observation log indicated that Ms. Lucio had been "observed" every 15 minutes beginning at 4:30 p.m. on July 8, 2008—the same day she had been found guilty of capital murder—and continuing until 6:00 a.m. on the morning Borrego testified. 37 RR 123-24. The prosecutor pointed out that according to the log, there was no record of Ms. Lucio "crying or yelling or screaming or distress," and that, "other than not eating breakfast, from 4:30 yesterday . . . until 6:00 a.m. this morning, [Ms. Lucio] was either laying down or sleeping." 37 RR 125-26.

The State's next witness was June Thompson, a neighbor of Ms. Lucio's. 37 RR 130. Ms. Thompson testified that she babysat Mariah once. *Id*. According to Ms. Thompson, Ms. Lucio had dropped Mariah off with her around 10:00 a.m. on an unspecified weekday. 37 RR 132. She

said Mariah had "an adult pamper and a bag of chips." *Id.* When asked if she made any observations about Mariah's body, Ms. Thompson said Mariah had a single bruise on the top of her belly button and one on the side of her thigh. *Id.* She described them as "just" bruises. *Id.* When asked if she did anything about the bruises she saw, she said she didn't because she was always told "don't get into anybody's business." 37 RR 134-35. According to Ms. Thompson, "the father" came to pick Mariah up around 3:00 p.m. 37 RR 133, 138. She wasn't sure at what point during the two months that she was neighbors with Ms. Lucio that this took place. 137 RR 138.

Ms. Thompson said that over the two months that Ms. Lucio's family lived next door, she heard a lot of running around and screaming and that there were "so many kids there." 37 RR 133. Although she never witnessed any abuse, she claimed she heard both parents swearing. 37 RR 134. Ms. Thompson testified that on some unknown day, she also heard what she speculated was "a belt" and a little girl yelling. 37 RR 135, 141. Ms. Thompson testified that the stairs at the apartment build-

ing where she and Ms. Lucio lived were "very" steep and "fairly dangerous." 37 RR 139. She said that she once babysat Mariah but could not remember what month it was. 37 RR 143.

The State then re-called Dr. Farley. 37 RR 149. Dr. Farley rehashed her prior testimony regarding the autopsy she performed on Mariah, including her conclusion that Mariah had "at least two bite marks" that were caused by "very, very forceful biting." 37 RR 156-57. As for the fracture of Mariah's arm, she told the jury that it could have been from "a blow," or from a pull or a twist that was "very forceful," and that it would be "very painful." 37 RR 159.

After resting its case at punishment, the State moved to reopen to offer into evidence a judgment of conviction for Ms. Lucio from a DWI offense. 37 RR 170.

The defense called two witnesses at punishment: Norma Villanueva, a clinical social worker and mitigation specialist, and Dr. John Pinkerman, a psychologist. Both Villanueva and Pinkerman described Ms. Lucio's history of abuse, relationships, and family life. Ms. Villanueva also summarized information contained in CPS records relating to Ms. Lucio, Mr. Alvarez, and their children. *See generally* 37 RR 175-

192. She briefly mentioned that Ms. Lucio had been abused by her step-father. *Id.* at 192. She also testified that Ms. Lucio had been abused in her marriage to Guadalupe Lucio, *id.* at 194, and in her partnership with Robert Alvarez. *Id.* at 195. Ms. Villanueva described Ms. Lucio's posture and facial expressions during police interrogation as consistent with a woman who has been abused. *Id.* at 216-17. She also testified that Ms. Lucio fit the profile of a battered woman. *Id.* at 219.

On cross-examination, prosecutor Padilla repeatedly challenged Ms. Villanueva's account of Ms. Lucio's childhood sexual abuse. He suggested that Ms. Lucio had denied being sexually or physically abused to another therapist.[12] *Id.* at 227; 38 RR 30-31. He implied Ms. Lucio was lying about her abuse. 37 RR at 227-28; 38 RR at 33-34. He expressed disbelief that Ms. Villanueva had failed to corroborate Ms. Lucio's account of domestic violence by speaking to her abusers. *Id.* at 228, 229. He asked whether there were any police reports verifying acts of domestic violence by Mr. Lucio or Mr. Alvarez. 38 RR 8-9. Ms. Villanueva incorrectly

[12] This suggestion was misleading. Although on an initial visit with a new therapist, Ms. Lucio did not disclose her history of abuse, she opened up about her childhood sexual abuse in subsequent sessions. *See* Ex. 36 at ¶ 16 (Juarez Dec.).

stated there were no reports.[13] *Id.* at 9. Padilla ridiculed the notion that Ms. Lucio's history of sexual abuse and domestic violence was in any way relevant. *Id.* at 9-10.

Padilla then challenged Ms. Villanueva's opinions by drawing her attention to what he (incorrectly) characterized as jail "disciplinary" reports.[14] *Id.* at 14-18. He falsely stated that Ms. Lucio had been involved in a fight and inciting "riotous behavior," *id.* at 15, and that she had assaulted another inmate. *Id.* at 18. Padilla wound up his cross-examination by dwelling on the possibility of Ms. Lucio becoming pregnant in jail. *Id.* at 37. He asked whether CPS had the "legal authority to protect the fetus" if a woman were to become pregnant while incarcerated. *Id.* at 38. He implied that if Ms. Lucio were to have a child while in prison, CPS would have no independent authority to remove the child. *Id.*

Dr. Pinkerman explained that he had conducted psychological testing and interviewed Ms. Lucio, and concluded that she had major depression and PTSD. *Id.* at 68. He confirmed that Ms. Lucio was a victim of

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[13] Ms. Lucio had reported at least one of Mr. Alvarez's assaults. *See* Ex. 53 (Robert Alvarez Police Reports).

[14] As discussed *infra* p.225, these reports did not reflect disciplinary violations, and Ms. Lucio was cleared of any involvement in the "fight" that Padilla mentioned.

physical and sexual abuse as a child and as an adult. *Id.* He noted that Ms. Lucio showed "emotional numbing" and "dissociation" during her police interview that was a consequence of her "long history" of "abuse and misuse." *Id.* at 79. He also testified that in his opinion there was a low risk that Ms. Lucio would re-offend while incarcerated. *Id.* at 74. He testified that Ms. Lucio did not fit any of the "categories" of women who kill their children. *Id.* at 77.

On cross-examination, prosecutor Villalobos focused on Ms. Lucio's ability to become pregnant while incarcerated. 38 RR 103. Villalobos challenged Dr. Pinkerman's assertion that Ms. Lucio would not have access to children while in custody, pointing out that she gave birth to twins after her arrest. *Id.* Villalobos suggested that if Ms. Lucio got pregnant while incarcerated, she would have access to children in the prison maternity ward. *Id.* at 104-05. He suggested she could "suffocate a child" or someone weaker than her. *Id.* at 107. He asked if Ms. Lucio was still in her "childbearing years." *Id.* at 108. Villalobos also sought to undermine Dr. Pinkerman's conclusion that Ms. Lucio was mentally ill as a result of her years of abuse, claiming—as he did with Ms. Villanueva—

that Ms. Lucio had denied being abused to another therapist, Jesus Juarez. Villalobos claimed again that Ms. Lucio had "chang[ed] her story," disregarding evidence that Ms. Lucio had, indeed, informed Mr. Juarez about her abuse. *Id.* at 111.

At closing, the prosecution cited Ms. Lucio's behavior after her conviction—specifically, that she was sleeping in her jail cell—as evidence of her "coldhearted" nature. 38 RR 145. They falsely stated that Ms. Lucio had been involved in "physical altercations" and "inciting a riot" in the jail. *Id.* Invoking false testimony claiming injuries on Mariah were adult bite marks, they compared Ms. Lucio to an animal, saying that she was "like a dog that bites a human person. Once that dog bites. . . there will always be a probability that it will bite again." *Id.* at 146. They scoffed at the evidence that Ms. Lucio had been sexually abused: "the issue about the sexual assault, what evidence is there?" *Id.* at 162. They asserted that her children didn't miss her, that they were better off without her. *Id.* at 166. They accused Ms. Lucio of having children as a way of receiving government benefits. *Id.* ("So why would you want to have 13 children with you? Because the State of Texas gives you that money."). Villalobos implied that she would harm "pregnant women" and other

prisoners if she were sentenced to life imprisonment. *Id.* at 170. Finally, Villalobos contrasted Ms. Lucio's poverty, substance abuse, and alleged abuse of Mariah with "[b]eautiful Cameron County," with its "football," "barbeques," and families. *Id.* at 172. He invoked fear of the "big city" and its "problems" coming to Cameron County, and asked the jury to "send a message" that "[w]e don't want this type of individual or behavior in our county." *Id.* He stated that sentencing Ms. Lucio to death was necessary "to retain our standard of life, our home—the way we know it now, the way it was known in the past." *Id.* at 173.

4. Direct appeal

On direct appeal, Ms. Lucio argued, *inter alia*, that the trial court erroneously excluded Norma Villanueva and Dr. Pinkerman's proposed testimony at the guilt phase because their testimony was relevant to the voluntariness of Ms. Lucio's custodial statements. *See Lucio v. State*, 351 S.W.3d 878, 898 (Tex. Crim. App. 2011). This Court held that these arguments were not preserved, and, in the alternative, that any error was harmless because the evidence was not relevant to voluntariness. *See id.* at 900, 902.

Ms. Lucio also argued that her rights were violated when the State obtained uncounseled statements from Ms. Lucio while she was in county jail, through therapist Beto Juarez. *Id*. at 906-07. This Court found that Juarez's notes that reflected Ms. Lucio's statements were not admitted at trial, although their substance was used to impeach defense witnesses at the punishment phase of the trial. *Id*. at 909. Ms. Lucio had objected only to the admission of the notes, and not to the State using them to impeach its witnesses, and thus Ms. Lucio failed to preserve her claims for appellate review. *Id*.

B. State Habeas Proceedings

Ms. Lucio then initiated state habeas proceedings. The habeas court denied the petition and adopted the State's proposed findings of fact and conclusions of law verbatim. 4th Suppl. WCR 17; *Ex parte Lucio*, 2013 WL 105179, at *1 (Tex. Crim. App. Jan. 9, 2013). This Court "adopt[ed] the trial judge's findings and conclusions" in a brief *per curiam* order. *Ex parte Lucio*, 2013 WL 105179, at *1.

C. Federal Proceedings

Ms. Lucio then filed a federal habeas petition, again explaining that the trial court's exclusion of experts violated her constitutional right to

present a complete defense, but the district court denied it. Mem. & Order at 45 (S.D. Tex. Sept. 28, 2016). A panel of the Fifth Circuit granted a certificate of appealability on "whether the exclusion of [Ms. Lucio's] proffered experts on the credibility of her confession violated her constitutional right to present a complete defense." *Lucio v. Davis*, 751 F. App'x 484, 494 (5th Cir. 2018) (per curiam). After further briefing and argument, the panel reversed the district court's decision, *Lucio v. Davis*, 783 F. App'x 313, 319-21 (5th Cir. 2019) (per curiam), but a sharply fractured en banc court subsequently held that relief was unavailable under AEDPA's narrow scope of review, *Lucio*, 987 F.3d at 456-87 (plurality opinion). The Supreme Court denied Ms. Lucio's petition for certiorari. *See Lucio v. Lumpkin*, 142 S. Ct. 404 (2021).[15]

[15] Ms. Lucio later filed a motion for the Fifth Circuit to recall its mandate, arguing that the State's opportunistic gamesmanship undermined the integrity of the proceedings. The Fifth Circuit denied the motion, over one judge's vote to grant it and another six judges' separate statements. Order Denying Mot. to Recall Mandate, *Lucio v. Lumpkin*, No. 16-70027 (5th Cir. Mar. 31, 2022). Judges Stewart, Dennis, Elrod, Haynes, and Higginson stated that they "continue to conclude that the dissenting opinions in which they joined were correct and that habeas relief should have been granted." *Id.* Judge Higginbotham wrote that Ms. Lucio's "case is a systemic failure, producing a train of injustice," with her "prosecution shadowed by the federal conviction of the prosecuting DA, now serving a 13-year federal sentence for selling his office over a time-period in which this indictment was returned." *Id.*

D. Evidence Attached To The Instant Application

New evidence from nationally recognized medical professionals, a pathologist, a police trainer, clinical psychologist, and neuroscientist collectively disprove *every element* of the prosecution's case against Ms. Lucio.[16] Indeed, various medical experts have reviewed the available evidence and affirm that the State relied on false and misleading evidence at trial in the guise of medical opinion, and that—in direct contravention to what the jury heard—Mariah's injuries can be attributed to complications after her fall "that have nothing to do with intentional force."[17] Further, two prominent experts on false confessions have concluded that Ms. Lucio's custodial statements—presented to the jury as a "confession" to murder—were actually the product of coercion, have all the hallmarks of a false confession, and amount primarily to a mere "regurgitation" of officer-fed facts.[18]

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[16] *See* Ex. 4-14 (Ophoven Dec.); (Laposata Dec.); (Freeman Dec.); (Davis Dec.); (Sullivan Dec.); (Barrett Dec.); (Gudjonsson Report); (Thompson Report); (Guarnera Dec.); (Faigman Dec.); (Brand Dec.).

[17] Ex. 5 at 6 (Ophoven Dec.).

[18] Ex. 10 at 15-16 (Gudjonsson Report); Ex. 11 at 22, 25 (Thompson Report).

This new evidence, detailed *infra*, reveals that Dr. Farley testified falsely when she told the jury that physical abuse was the *only* explanation for Mariah's extensive bruising and death, that Mariah had adult-sized bite marks on her body, and that the abuse that purportedly caused Mariah's death had to have occurred within twenty-four hours of her death, making impossible Ms. Lucio's defense that Mariah declined after an accidental fall two days earlier. Moreover, there is now scientific evidence that the jury never heard, demonstrating that Mariah's injuries were entirely consistent with head trauma incurred by an accidental fall two days before her death, and new science revealing how Dr. Farley's knowledge of Ms. Lucio's "confession" corrupted her autopsy process and ultimate findings.

Furthermore, there is now new science regarding Ms. Lucio's exceptionally high risk of falsely confessing during the relentlessly coercive, nighttime interrogation, due to her history of significant trauma and domestic abuse, rendering her custodial admissions unreliable, as well as new scientific evidence that Ranger Escalon's testimony that he could discern Ms. Lucio's "guilt" by her demeanor and reactions is false as a matter of now neuroscientific consensus.

In addition to this scientific evidence, there are eyewitness accounts of Mariah's condition before she fell down the stairs, the fall itself, and the steady decline in her health afterwards that neither Dr. Farley nor Ms. Lucio's defense counsel considered. They were not considered because the police and prosecutors suppressed them. Witnesses told police and CPS investigators—in the presence of police—that Mariah did have bruises around her eye after the fall. Her older sister Selina told CPS Investigator Lucy Arreola that Mariah had bruises on her face after her fall. Her sister Alexandra told Arreola that Mariah got a bruise around her eye from the fall. Investigator Arreola's reports were not disclosed to Ms. Lucio's defense counsel. Additionally, there was a videotaped interview of Mariah's brother Rene conducted three days after she died, in which Rene described seeing Mariah fall down the stairs and seeing a bruise around her eye that developed afterwards. The State suppressed that videotape, and defense counsel did not learn about it until the third day of trial, when it was too late to present Rene's evidence to a pathologist.

Defense counsel was prevented from considering suppressed evidence that *seven* of Ms. Lucio's older children told police and the CPS

investigators working with them that Ms. Lucio never abused Mariah, or any of her children.[19] These included Investigator Arreola's interview with the oldest daughter, Melissa (known as "Little Melissa"), who saw Mariah the day she fell, before the fall, and "didn't notice any markings or bruises." The next oldest daughter, Daniella, told police the night Mariah died that Ms. Lucio had not been abusive, that Mariah had been fine two weeks earlier, and that her sister Alexandra told her about Mariah's fall the day before she died. Alexandra herself described to Investigator Arreola the steady decline in Mariah's health after the fall, which was entirely consistent with illness associated with a blood coagulation disorder.

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Ms. Lucio has now spent fifteen years on death row, and is scheduled to be executed on April 27, 2022.

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[19] The State went to extraordinary lengths to suppress the evidence that would have undermined Dr. Farley's conclusions and the testimony of law enforcement witnesses. Moreover, prosecutors threatened CPS personnel with prosecution—not for withholding evidence—but for contributing to Mariah's death. 31 RR 12. Their zeal to suppress evidence was so great that they threatened—and granted immunity to—a CPS case worker with criminally negligent homicide even though she had no contact with Mariah's case until after she was dead. 33 RR 150-62.

LEGAL STANDARD

This Court's initial inquiry into a subsequent application under Article 11.071 is limited to whether the applicant meets the threshold showing required by § (5)(a). Ms. Lucio presents grounds for satisfying §§ 5(a)(1), (2), and (3).

In order for consideration of the merits to take place under § (5)(a)(1), she need only show that: 1) the factual or legal basis for her current claims were unavailable at the time she filed her previous application; and 2) the specific facts alleged, if established, would constitute a constitutional violation that would likely require relief from either the conviction or sentence. *See Ex parte Campbell*, 226 S.W.3d 418, 421 (Tex. Crim. App. 2007). Therefore, to the extent the State seeks to challenge the credibility or weight of any of the allegations in this Application, the proper forum for such challenges is before the state trial court.

CLAIMS FOR RELIEF

I. CLAIM 1: BUT FOR THE STATE'S USE OF FALSE TESTIMONY, NO JUROR WOULD HAVE VOTED TO CONVICT MS. LUCIO OF CAPITAL MURDER

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

A. Ms. Lucio's Conviction Was Procured By False Evidence, In Violation Of Her Due Process Rights

1. The medical evidence shows Dr. Farley testified falsely and supports relief

Before conducting Mariah's autopsy, Dr. Farley was told that Ms. Lucio had "confessed" to abusing Mariah, and Dr. Farley was accompanied in the autopsy suite by two of the interrogating officers who had already determined, without any scientific basis to do so, that Ms. Lucio had killed Mariah by physical abuse.[20] Dr. Farley believed that Ms. Lucio had admitted her guilt and performed the autopsy with that belief in mind, construing ambiguous evidence to support that hypothesis and overlooking other possible causes and contributions to Mariah's death that would support a different conclusion. Dr. Farley failed to consider Mariah's prior medical history, which included trouble walking and documented falls, as well as a prior traumatic brain injury; she ignored information about Mariah's behavior in the days before she died, including

[20] *See, e.g.*, 33 RR 115-16 (Escalon testifying, falsely, that he "knew" Ms. Lucio was guilty of killing her daughter based on her lack of eye contact and demeanor during the interrogation); 33 RR 53 (Detective Cruz testifying that, based primarily on Ms. Lucio's custodial statements, "as a trained police officer involved in this case" Cruz "believe[d] that Melissa Lucio had caused the death of the child"); 33 RR 119 (Escalon telling the jury conclusively that there was "nothing indicating" that "the injuries could have been caused by a fall.").

excessive sleep and loss of appetite, which were consistent with head trauma after an accidental fall; and she ignored potential non-abuse causes for Mariah's injuries.

New medical evidence shows that Dr. Farley testified falsely in Ms. Lucio's case.[21] Dr. Janice Ophoven is a forensic pathologist with special training and experience in the evaluation, investigation, and interpretation of childhood injuries; she has over 30 years of experience in the field. *See* Ex. 4 (Ophoven Dec.). This Court relied on Dr. Ophoven's expert testimony in deciding *Ex parte Henderson*, 384 S.W.3d 833, 842-44 (Tex. Crim. App. 2012). Dr. Michael Laposata is the Chairman of the Pathology Department for the University of Texas, Galveston, whose clinical focus is on blood coagulation and the diagnosis of bleeding disorders. *See* Ex. 5 (Laposata Dec.). Dr. Farley told the jury that Ms. Lucio's defense—that Mariah had fallen down a steep set of stairs at their old apartment

[21] This Court has previously set aside a capital murder conviction that rested largely on Dr. Farley's false testimony. *See Ex parte Velez*, 2013 WL 5765084, at *1-2 (Tex. Crim. App. Oct. 23, 2013) (describing how State's theory collapsed at habeas hearing where, unlike at trial, counsel rigorously challenged Dr. Farley's testimony); *see also* Court's Findings of Fact and Conclusions of Law, *Ex parte Velez*, No. 07-CR-721-WR (404th Dist. Ct., Cameron Cnty., Apr. 2, 2013), https://bit.ly/3M2Dhzw.

about two days before her death—was not possible, because the widespread bruising on Mariah's body could not have resulted from an accidental fall, and instead could mean only that Mariah had been abused. She testified unequivocally that: "[T]his is a child that has been beaten. This is a battered child…Maybe if they fell off a house, fell off a significant height more than once. But these [bruises] are—all over the body. This isn't a simple fall." 34 RR 34. But, as Dr. Ophoven and Dr. Laposata both explain, Dr. Farley ignored that Mariah exhibited clear signs of disseminated intravascular coagulation (DIC), which is a blood coagulation disorder that can result in both hemorrhages (bleeding) and abnormal thrombosis (clotting) throughout the body, manifesting in extensive bruising throughout the body.

Both head trauma and infection are common causes of DIC. Mariah's fall down a steep flight of stairs two days before she died—a fall confirmed by multiple members of her family—is precisely the kind of trauma that can lead to DIC. As Dr. Laposata explains: accidental trauma, including head trauma, is a "notorious catalyst for DIC/clotting reactions." Ex. 5 at 2 (Laposata Dec.). Dr. Laposata explains that Mariah's autopsy documented certain factors, such as fibrin thrombi (clots)

in the blood vessels, which supported that she was experiencing DIC. *See id*. Additionally, emergency room reports show that Mariah appears to have been battling an infection at the time of her death: she had a "significant fever" when treated in the emergency room, despite already having been dead for nearly an hour. Ex. 4 at 6 (Ophoven Dec.). This is further supported by a new declaration from Dr. Harry Davis, Mariah's treating physician at Valley Baptist Medical Center, who observed that Mariah had a high, persistent postmortem fever the night she died. The presence of fever—a rare occurrence in a child who had already been deceased for some time—indicated to Dr. Davis that Mariah was fighting an infection and has always made him doubt the State's theory that Mariah died by intentional force. *See* Ex. 7 (Davis Dec.).

Importantly, DIC would explain the bruising on Mariah's body. When a person has DIC, routine handling of their body—such as EMS workers performing CPR, or a parent lifting or moving their child, even gently—can result in bruising and hemorrhaging. *See* Ex. 4 at 6 (Ophoven Dec.), Ex. 5 at 2-3 (Laposata Dec.). DIC, in combination with the fall itself, can explain the appearance of bruising on Mariah's body. Precisely because DIC can cause rapid and profound bruising throughout the body

and face, and contusions on internal organs, Dr. Laposata explains: "DIC-associated bleeding and bruising can be—and has been—incorrectly attributed to child abuse when it is caused by accidental trauma and infection." *See* Ex. 5 at 2 (Laposata Dec.).

Dr. Farley's repeated testimony that the bruising on Mariah's body *had* to come from a beating, because of the amount of bruising and various locations of the bruising, was thus untrue.[22] Mariah's autopsy findings were indicative of DIC, which provided a non-abuse explanation for her injuries and bruising—an explanation the jury never heard.[23] Not only did this false testimony impact the jury's determination of innocence

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[22] 34 RR 56 ("You can get bruising falling down the stairs, but as I said earlier, some of these are under the eye. That's not a commonplace to bump your head as you're tumbling down the steps. The lower cheeks—under the chin—the abdomen, and in the recessed areas. No. In my opinion, this came from a beating); *id*. ("I think I made it clear. I think it's due to being beat. That child had more bruises than I've ever seen on any case that I had before. This is a beating.").

[23] Dr. Farley also claimed—falsely—to "know" that Mariah's injuries resulted from systemic abuse because she could "date" certain bruises as older than others, based on their color. 34 RR 20. This testimony is scientifically wrong. Studies available at the time of Ms. Lucio's trial showed that bruise color bears no indication on the age of the bruise, and that bruises can appear different colors at any point in the evolution of the bruise. *See* Langlois NEI, Gresham GA, *The ageing of bruises: a review and study of the colour changes with time*, Forensic Science International 1991; 50: 227-238; Stephenson T, Bialas Y., *Estimation of the age of bruising*, Arch. Dis. Child 1996; 74(1): 53-5.

or guilt, but Dr. Farley's false testimony was used by the State to argue for the imposition of a death sentence.[24]

Drs. Ophoven and Laposata also explain that Dr. Farley gave false testimony regarding the alleged timing of Mariah's injuries. Dr. Farley testified that the absence of hemosiderin deposits and macrophages in Mariah's brain meant that the injuries to her brain happened very recently, within twenty-four hours of death. *See* 34 RR 55, 57. This *false* testimony made Ms. Lucio's defense impossible: if it were true that the absence of hemosiderin deposits and microphages meant that the injuries were less than twenty-four hours old, Mariah's injuries could not, then, have resulted from an accidental fall *two days* prior.

That testimony, however, was also untrue. As Drs. Laposata and Ophoven explain, and is well-established in scientific literature, hemosiderin may not appear for *several days* post-injury, and the timing of its appearance is variable. *See* Ex. 5 at 3 (Laposata Dec.); Ex. 4 at 6 (Ophoven Dec.). The absence of hemosiderin and macrophages is common two

[24] 36 RR 17 ("She killed this little girl, Dr. Farley told you. She killed this little girl. She beat her to death. This Defendant is a cold-blooded murderer. She knew exactly what she was doing each and every time she struck the little girl.").

days post-injury; it is even common three or four days after an injury. *See* Ex. 5 at 3 (Laposata Dec.). Scientific literature also reflects that these markers appear at variable rates and often *many days* after an injury.[25] Thus, contrary to what Dr. Farley told the jury, the absence of these indicators in Mariah's brain tissue is *not* evidence that her injuries occurred within twenty-four hours, and instead is entirely consistent with an accidental trauma *two days* before. Whereas Dr. Farley's false testimony made Ms. Lucio's defense—that Mariah died from complications of an accidental fall two days earlier—impossible, the medical evidence actually entirely supports that defense.

Child abuse is a diagnosis of exclusion. Contemporary medical science now recognizes that a forensic review of an unexpected deterioration in a young infant/child requires a careful, complete, and *unbiased* analysis. Dr. Laposata explains that the American Academy of Pediatrics ad-

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[25] *See also* Squier, W. and Mack, J., *The Neuropathology of Infant Subdural Hemorrage*, Forensic Science Intl. 187 (2009) 6-13 (hemosiderin initially identified up to four days post injury; infiltrating microphages first visible up to four days post-injury). Other literature shows even longer and more variable intervals. *See* Walter, T. et. Al., *Pathomorphological Staging of Subdural Hemorrhages: Statistical Analysis of Posttraumatic Histomorphological Alterations*, Legal Medicine 11 (2009) 556-562.

vises that pediatricians must rule out coagulation, or blood clotting, disorders such as DIC—alternative causes of bruising—before even considering whether abuse is at issue. *See* Ex. 5 at 3 (Laposata Dec.). Yet Dr. Farley did the opposite here: steeped in extrinsic, biasing information, she failed to review any of Mariah's medical history to look for any explanation or contributing cause to her injuries, conduct any basic laboratory tests to diagnose a coagulation disorder, or even perform simple testing to confirm the presence of infection or sepsis. Ex. 4 at 5 (Ophoven Dec.). Without conducting any biomechanical analysis, she ignored indications that Mariah's fatal condition had another cause, simply assumed the conclusion of abuse, then falsely told the jury Mariah's head injury had to have come from a blow, not a fall. *Id.* at 3-4.

Dr. Farley not only testified falsely in substance; her inverted approach critically left key evidence uncollected and obscured the true story of Mariah's death. A mere interview with Ms. Lucio or other members of the family could have revealed historic data about Mariah's significant changes in behavior and worsening condition over the two days after the fall that would have offered clear evidence that this child died of compli-

cations of an accidental head trauma. Instead, informed by police investigators, Dr. Farley ignored all signs to the contrary to proclaim abuse. Indeed, as Dr. Ophoven concluded: "The investigation into Mariah's death appears to have been significantly prejudiced, not evidence based, and without adequate consideration of alternative issues. The medical evidence is consistent with a cause of death related to a fall down the stairs two days before Mariah's collapse and other complications that went unexplored." *Id.* at 6.

At every turn, Dr. Farley's trial testimony reflected a failure to consider alternative causes, as is necessary for a diagnosis of exclusion, and an insistence that Mariah's injuries had to have been caused by abuse—no matter how contrary that conclusion was to scientific fact. For example, Dr. Farley testified that she could tell that Mariah had been abused because she had "contusions to both lungs" and a "contusion to the right kidney." 34 RR 28. When asked what would have caused such injuries, Dr. Farley yet again told the jury there could only be one explanation: it must have come from violent, intentional force—from "punches or stomps—or slams." 34 RR 29. But as both Dr. Laposata and Dr. Ophoven explain, that simply is not true. A patient in DIC will bleed and suffer

bruising (contusions) with no or minimal force or pressure. By the time Mariah reached the autopsy suite—even by the time she reached the emergency room—she had experienced many rounds of CPR, both in her home and in the hospital; she'd been intubated; she'd been handled by numerous EMS workers and doctors in an effort to revive her. Any one of these actions would easily bruise someone in DIC. Indeed, CPR can cause bruising and contusions to a patient's lungs *even for someone not in DIC*. Ex. 4 at 5 (Ophoven Dec.). A proper diagnosis of exclusion could never have found abuse in these circumstances.

The declaration of Dr. Christopher Sullivan, pediatric orthopedic surgeon at the University of Chicago, highlights additional false testimony from Dr. Farley. Dr. Farley erroneously testified that an old, healing fracture to Mariah's left humerus (top arm bone)—which she characterized as a "spiral" fracture—had to have come from someone "tugging on" or "twisting" Mariah's arm. Had Dr. Farley testified accurately, the jury would have heard that fractures like the one in Mariah's arm bone are very common in walking toddlers, who fall often, and can result simply from "[j]ust a basic fall on the arm from a standing position or kids playing rough" with each other. Ex. 8 at 2 (Sullivan Dec.). Mariah, of

course, fell frequently because of her developmental delays and misshapen feet. Dr. Sullivan explains that non-displaced fractures, like the one in Mariah's arm, are among the most common childhood injuries. *See id*. at 3. Dr. Sullivan also explained that identifying a fracture as "spiral" does not indicate abuse; spiral fractures, too, can result from simple falls. *Id*. at 1-2. Further undermining Dr. Farley's testimony, Dr. Sullivan explained that, actually, Mariah's "fracture in the left humerus is not a spiral fracture" at all. *Id.* at 2.

Given that Mariah's fracture was non-displaced, meaning the bone was merely cracked but still properly aligned, and given that it was in her arm, any signs of injury would likely have been subtle and easily missed by caregivers. *Id.* at 2. As Dr. Sullivan explains, "there is nothing about the nature of [Mariah's] fracture that indicates it was the result of an intentional act or abuse." *Id.* at 3.

Critically, Dr. Farley testified falsely and without basis in science that Mariah had bite marks on her body. Dr. Farley offered extensive testimony about these purportedly "obvious" bite marks on Mariah's back, characterizing them as "like dragging of the teeth across the back."

34 RR 17; *see also id.* (characterizing it as a "big bite!" and "painful injury," "with raking, where it just pulls flesh off of the back"). Dr. Farley buttressed her testimony with the purported opinion of a forensic odontologist (who did *not* testify or provide a report), but who, according to Dr. Farley, told her over the phone "they're bite marks." 34 RR 33. Dr. Farley also opined that the "bite marks" were "adult size[d]," thereby excluding the possibility that the purported bites were made by a child or teenager. *Id.* And in the penalty phase of the trial, Dr. Farley testified that the bite marks were evidence of battered child syndrome, that there were "at least two bite marks" on Mariah's back, that these would be painful because "the teeth were dragged along the skin and caused abrasions," and that the injuries resulted from "[v]ery, very forceful biting." 37 RR 156-57.

Dr. Farley's testimony—that these abrasions could be identified as bites based on their appearance, and specifically as adult bites—was extremely powerful evidence presented to the jury that Mariah was intentionally injured by an adult, and in an especially gruesome manner. But since the time of trial it has become well-established that this testimony is without any scientific basis, and false. Dr. Adam Freeman, former

President of the American Board of Forensic Odontology, explains in his declaration, there are "numerous examples of circular or half-mooned injuries—not dissimilar to the wounds at issue here—that both laypeople and forensic odontologists have mischaracterized as human bite marks, when the wounds were actually caused by a range of inanimate objects, even a child's toy, or a piece of fencing." Ex. 6 at 8-9 (Freeman Dec.). Dr. Freeman includes a photograph in his declaration of one such injury: a circular injury, similar to the one found on Mariah's back, that was believed by forensic dentists shown the injury to have been caused by a human bite, but was *known* to have been caused by a corrugated box. *Id*. at 9.

Exacerbating the falsity of Dr. Farley's claim that she could identify the injuries as bite marks, she also testified these marks came from an *adult* mouth. *See* 34 RR 33. Yet, as Dr. Freeman explains: there is "no evidence to support the fact that forensic dentists can even agree on what a bitemark is, never mind the more advanced proposal that such a pattern may actually be linked to someone or classified as an adult's or a child's bitemark." Ex. 6 at 7 (Freeman Dec.).

It is now scientific consensus that bite mark analysis is foundationally invalid and unreliable. *Ex parte Chaney*, 563 S.W.3d 239, 258 (Tex. Crim. App. 2018) (observing that bite mark evidence, "which once appeared proof positive of … guilt, no longer proves anything"). Since the time of Ms. Lucio's trial, the National Academy of Science (NAS), the Texas Forensic Science Commission, and the President's Council of Advisors on Science and Technology, supported by numerous scientific studies from board certified odontologists, have established that there *is no scientific validity* to identifying a patterned injury as human bite mark. For example, a 2009 NAS report found that bite mark evidence is scientifically invalid, grossly subjective, and especially prone to the influence of cognitive bias.[26] In 2015, leading forensic odontologists—including Dr. Freeman, then the American Board of Forensic Odontology president—conducted a study that demonstrated the fundamental unreliability of bite mark analysis, revealing that expert testimony which conclusively identifies an injury as a human bite mark is in fact without a scientific basis. *See* Ex. 6 at 9-11 (Freeman Dec.). In that study, *none* of the 100

[26] Strengthening Forensic Science in the United States: A Path Forward at 176 ("NAS Report"), available at https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf

case studies resulted in unanimous agreement among board-certified examiners regarding which injuries could be characterized as human bite marks. *Id.* These leading forensic odontologists thus concluded that the "discipline" of bite mark analysis was "unreliable from the outset," in that even the foundational inquiry required for bite mark analysis—whether an abrasion on a human body is or is not a bite mark—could not be reliably determined. *Id.* And in 2016, the President's Council of Advisors on Science and Technology concluded that "available scientific evidence strongly suggests that examiners cannot consistently agree on whether an injury *is* a human bite mark and cannot identify the source of bite mark with reasonable accuracy."[27] As a result, the Council found "the prospects of developing bite mark analysis into a scientifically valid method to be" so low that it "advise[d] against devoting significant resources to such efforts."[28]

[27] Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods at 87, available at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf.

[28] *Id.*

In 2015, after the exoneration of a Texas man who had been wrongfully convicted based on bite mark analysis,[29] the Texas Forensic Science Commission undertook a year-long investigation and issued a report in 2016 recommending a moratorium on the use of bite mark evidence in all criminal cases in the state of Texas.[30] Unless and until research and "rigorous and appropriately validated proficiency testing" can establish reliable criteria for "identifying when a patterned injury constitutes a human bite mark" and for "identifying when a human bite mark was made by an adult versus a child," the Commission concluded such analysis was too unreliable to be used in court.[31]

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[29] After having spent twenty-eight years wrongfully incarcerated, in 2018, the Texas Court of Criminal Appeals found that Steven Mark Chaney was "actually innocent" of a 1987 murder conviction that had been procured based primarily upon faulty bite mark testimony. *Chaney*, 563 S.W.3d at 258.

[30] See Forensic Bitemark Comparison Complaint Filed by National Innocence Project on Behalf of Steven Mark Chaney—Final Report (Apr. 12, 2016), available at https://www.txcourts.gov/media/1440871/finalbite markreport.pdf.

[31] *Id.* at 15-16. It is also worth noting that any bite mark analysis purporting to distinguish adult from child bite marks is particularly unreliable. Dr. Freeman explains that because "a human's dental arch may be fully developed when a child is as young as eight years old, with some, minimal, increase until age thirteen," "there is no reliable way to measure a circular or half-mooned abrasion and determine whether it is attributable to an adult's dentition, as compared to [a] child's." *Id.* at 11-12. Dr. Farley's testimony that the "bite marks" were attributable to an adult is therefore "scientifically indefensible." *Id.* at 11.

In sum, Dr. Farley's testimony identifying the injuries on Mariah's body as human bite marks lacks any scientific basis. This is exactly what new research—including from the Texas Forensic Science Commission, which has recommended a state-wide moratorium on the use of such testimony in Texas—shows is scientifically invalid. As Dr. Freeman explained, Dr. Farley's claim to "identify" these injuries as bite marks is plainly false: "there is no published scientific literature that supports the use of bite marks in criminal matters. There are no studies, empirical experiments, or systematic reviews that provide any objective metrics or assurances that the process of identifying injuries on a human body as caused by human bite marks is reliable." Ex. 6 at 3 (Freeman Dec.).

2. Ranger Escalon's demeanor reading was false and supports relief

The State presented evidence from Ranger Escalon that he could determine Ms. Lucio's guilt based on her demeanor. This testimony is "erroneous as a matter of now-established behavioral science and neuroscience," and the firm neuroscientific consensus that has developed since the time of Ms. Lucio's trial disproving "emotion reading." Ex. 9 at 2 (Barrett Dec.). Experts confirm that "Ranger Escalon's statements that he was able to determine [Ms. Lucio's] internal thoughts and emotions

from her facial movements, posture, body movements and diction" in the interrogation room after her daughter's death "is scientifically baseless and false." *Id.* at 2. In direct contrast to Escalon's testimony, scientific study has established that "there is no single template, fingerprint, or signature of physical signals that express guilt or innocence across all individuals in all situations, regardless of life history and culture." *Id.* at 4. Consequentially, there is no support that any person "can detect a person's emotional state from a single pattern of facial movements, physiological signals, vocal signals, or even neural signals in a way that generalizes across instances of that emotion category." *Id.* at 5.

Ranger Escalon told the jury that he could determine with complete certainty Ms. Lucio's guilt by interpreting her facial expressions and demeanor. Ranger Escalon testified he was able to make this determination based on his observations of Ms. Lucio when he entered the interrogation room even before his questioning began. He testified that Ms. Lucio had her "head down," and "she was not making eye [contact] with the investigator" who was questioning her. 33 RR 115. These movements according to Escalon were signs of Ms. Lucio's guilt. Escalon testified he could tell "right there and then, I knew she did something" and she "was

ashamed of what she did." 33 RR 115. Ranger Escalon told the jury that based on his "experience in law enforcement" and his "experience in interviewing people"[32] he knew that a slumped posture equated with untruthfulness: "That's one of the most common clues . . . that you see—somebody with their head down, and like their shoulders are slouched forward, and they won't look at you. They're hiding— hiding the truth." 33 RR 116. Escalon testified that Ms. Lucio's slouched appearance was tantamount to an admission, that she was conveying: "I did it." 33 RR 115. Ranger Escalon further testified that there exist clear, discernable, "black and white" differences between the behavior of an "honest," innocent person and Ms. Lucio's behavior. 33 RR 116 ("If you're accusing somebody of doing—especially something as serious as this—and you didn't do it, you're going to be upset, and you're going to be offended, and

[32] Ranger Escalon's sensory observations of Ms. Lucio's body language and facial expressions represented the limits of permissible police lay witness testimony. *See* Ex. 13 at 4 (Faigman Dec.). Without being qualified as an expert, Escalon went on to inappropriately "offer an expert translation of what those body postures and facial expressions said about Ms. Lucio's ultimate guilt or innocence. This analysis would have been admissible only if it passed muster as expert testimony under Texas Rule of Evidence 702." *Id.* However, because his testimony lacked both scientific expertise and scientific reliability, his analysis" also fell well short of this standard." *Id.*

you want to get out of there. You want to make this right and clear your name. It's black and white").

Ranger Escalon's testimony that he was able to determine Ms. Lucio's guilt based on her demeanor is scientifically baseless and false and entitles Ms. Lucio to relief. Neuroscientist Dr. Lisa Feldman Barrett,[33] whose "expertise is in the area of how the human brain generates instances of emotion, perceives emotions in others, and regulates human behavior" explains the recent sea-change that occurred and current neuroscientific consensus. Ex. 9 at 1 (Barrett Dec.). For decades prior to Ms. Lucio's trial, the dominant view among neuroscientists was that categories of emotion (i.e., sadness, anger) are "expressed with stereotypic facial movements" and "it was assumed that these fixed emotions could be universally detected independent of person, experience or culture." *Id*. at 3. This view of emotion has now been decisively rejected, "disconfirmed [by]

[33] Dr. Lisa Feldman Barrett is a University Distinguished Professor of Psychology and the Director of the Interdisciplinary Affective Sciences Laboratory at Northeastern University. She is also appointed to Massachusetts General Hospital/Harvard Medical School in the Program for Psychiatric Neuroimaging and the Athinoula A. Martinos Center for Biomedical Imaging. Her expertise is in the area of how the human brain generates instances of emotion, perceives emotions in others, and regulates human behavior. She is among the top 1% of most-cited scientists in the world for this research, which includes more than 250 peer-reviewed scientific publications. Ex. 9 at 1 (Barrett Dec.).

studies both inside the laboratory and in the real world, including brain imagining studies, cross-cultural studies of emotional expressions, physiology studies and experiments using artificial intelligence algorithms." *Id.*

The current neuroscientific consensus view was reached after confirmatory studies failed to replicate earlier studies that had asserted the existence of fixed, universal categories of emotion. The field then utilized "newer brain imagining" techniques (including the EEG, MRI, PET, fMRI) which also "failed to find evidence to support fixed, universal emotion categories." *Id.* At the request of the Association for Psychological Science, the international scientific society of more than 30,000 scientists, in 2016 Dr. Feldman Barrett and a team of senior scientists examined more than 1,000 peer-reviewed published scientific articles on whether it is possible to infer a person's emotional state, including their state of mind, from their facial movements. The 2019 peer-reviewed consensus paper based on the prevailing scientific study and literature in the field concluded that "there is no scientific basis for the notion that a particular facial movement or set of movements can be 'read' to reveal an underlying emotional state." *Id.* These conclusions "extend to body

movements and non-verbal vocalizations." Ex. 9 at 3 (Barrett Dec.). In other words, hundreds of scientific studies have established the current neuroscientific consensus that: "Observable movements (such as facial movements, bodily movements, and body posture) and non-verbal vocalizations (such as tone of voice) do not carry inherent . . . emotional meaning." *Id*. at 5.

New scientific evidence establishes the falsity of Escalon's testimony that he could infer lack of remorse, absence of grief, or culpability from Ms. Lucio's eye contact and body posture. *Id*. at 4. Dr. Feldman Barrett explains:

"No person… can detect a person's emotional state from a single pattern of facial movements, physiological signals, vocal signals, or even neural signals in a way that generalizes across instances of that emotion category. Neuroscientists have attempted to make such emotional inferences measuring signals in behavior (facial muscle movements, postural changes, vocalizations, word use), peripheral nervous system changes (heart rate, breathing rate, skin conductance) and brain imaging patterns, but to date *none* of these methods of detecting emotional state have

proven reliable, specific or generalizable across published studies." *Id*. at 5.

Ranger Escalon's testimony that there exist universal signs of deceit and guilt and that he had the ability to ascertain with "black and white" clarity that Ms. Lucio was guilty and being dishonest was false: in fact, Escalon's conclusions were no more than "guesses about the psychological meaning of her observable movements and vocal diction."[34] *Id*. at 3-4.

Significantly, ample scientific evidence now exists "that the actual facial and bodily movements, as well as tone of voice, that express a person's immediate state of mind" including their feelings and emotions vary "with that person's background and life history and how this background and history interact with the immediate situational context." *Id*. at 4.

[34] Outside the realm of neuroscience, studies looking into the ability to the detect of guilt or deception based on nonverbal cues or behaviors have found accuracy rates equivalent to flipping a coin. *See*, *e.g.*, Aldert Vrij, Christian A. Meissner, & Saul M. Kassin, Problems in expert deception detection and the risk of false confessions: no proof to the contrary (2014). Saul M. Kassin et al., *Police-Induced Confessions: Risk Factors and Recommendations*, 34 Law and Hum. Behav. 3, 6 (2009) (finding trained police investigators "perform only slightly better, if at all," in making such judgments).

Thus, Escalon's testimony that any innocent individual would "be upset…they're going to tell you: 'Get out of my face. I didn't do anything'" and Ms. Lucio's passivity was indicative of her guilt was scientifically baseless. 33 RR 116. Escalon's testimony was false because there is no categorical, detectable difference in behavior between a guilty person and an innocent person.

The impact of Escalon's false testimony was magnified by the inability of the defense "to present evidence regarding the *particular meaning* of Ms. Lucio's facial movements and other aspects of her demeanor in the context of her personal history." Ex. 9 at 7 (Barrett Dec.) (emphasis added). This is because "the facial and bodily movements that express the instances of a particular category of emotion" are "highly variable and person- as well as context-dependent, rather than fixed across situations and people." *Id.* at 4. In fact, science instructs that Ms. Lucio's physical reactions are *not* indicative of guilt, contrary to Ranger Escalon's inex-

pert opinion. These behaviors are common for people with abuse histories.[35] There is a consensus in the behavioral and neuroscientific community regarding commonly observed symptoms of chronic abuse and the neurobiological underpinnings of these commonly observed symptom clusters (e.g., avoiding eye contact; appearing detached)." Ex. 9 at 5-6 (Barrett Dec.). While the State presented erroneous testimony that Ms. Lucio's demeanor was reflective of guilt, given her history of trauma "[a] disengaged demeanor, sometimes described as 'learned helplessness,' is a common presentation for someone who has been the target of chronic physical and sexual abuse."[36] *Id.* at 5. In sum, not only was Escalon's

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[35] At trial, the State presented prejudicial testimony from several other officers and first responders regarding Ms. Lucio's demeanor. 33 RR 37 (Officer Rebecca Cruz) (describing Ms. Lucio's emotional condition as "it was relieved—there was no emotion. No emotion"); 33 RR 69-70 (Officer Jamie Palafox) (testifying her demeanor stood out because she "looked very calm"); 33 RR 91-92, 93 (Randall Nester) ("[S]he wasn't overly distressed. She wasn't really crying or showing a whole lot of emotion. She was extremely calm for the situation") ("She didn't act at all like what I would expect of a mother"); 33 RR 103 (David Mendoza) ("Usually, when we ask questions, when it's a child, the mom can't answer them. And we have to literally ask a couple of times").

[36] As expert Thompson similarly noted, "Ms. Lucio is especially susceptible to being misclassified as her perceived behavioral anomalies may be derivative of her exposure to trauma as well as the immediate recency of losing her child. Ms. Lucio is seen slouching, becoming emotional, leaning on the table and even appears to attempt to rest her head when the investigators leave the room. These behaviors are not exclusively indicative of deception but could be caused by a multitude of reasons. Ms. Lucio's heightened emotional state, the likeli-

testimony false and misleading because we now know his testimony is scientifically unsupported, but compounding the impact of his misleading testimony on the jury, the jury also never heard that the very behaviors that Escalon testified were certain signs of guilt in fact are particularly common for someone, like Ms. Lucio, who has been the victim of chronic physical and sexual abuse. *Id.*

B. Ms. Lucio Is Entitled To A New Trial Because Her Conviction Was Based On False, Misleading, And Scientifically Invalid Testimony

Ms. Lucio is entitled to a new trial under *Ex parte Chabot*, 300 S.W.3d 768, 770-71 (Tex. Crim. App. 2009) and *Ex parte Chavez*, 371 S.W.3d 200, 207-08 (Tex. Crim. App. 2012). Specifically, the State violated Ms. Lucio's rights to a fair trial, to due process, and to avoid cruel and unusual punishment when it used false scientific evidence to secure her conviction and death sentence. Because the scientific consensus on the falsity of bite mark evidence is new, and Dr. Farley's testimony that specific injuries were adult bite marks and thus had to have been caused

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hood of being re-traumatized by the interrogators behaviors and her fears induced by the threats being made are all likely sources of anxious or concerning behavior, that interrogators apparently perceived as indicative of deception or guilt." Ex. 11 at 17 (Thompson Report).

by intentional abuse, this claim was previously unavailable and thus meets the strictures of Article 11.071, § 5(a)(1). Further, because the State relied on Ranger Escalon's false testimony that he could tell Ms. Lucio was guilty by her demeanor during the interrogation, testimony which is now known to be false after the 2019 consensus paper, this claim was also previously unavailable and thus, too, meets the strictures of Article 11.071, § 5(a)(1).

1. The Chabot/Chavez standard applies

The *Chabot*/*Chavez* standard does not require proof that the State *knew* that the testimony at issue was false. An applicant must only show "whether the testimony, taken as a whole, gives the jury a false impression." *Chavez*, 371 S.W.3d at 208. The State denies due process where, as here, it uses false testimony to obtain a particular sentence, regardless of the State's intent. *Estrada v. State*, 313 S.W.3d 274, 287-88 (Tex. Crim. App. 2010) (citing, *inter alia*, *Johnson v. Mississippi*, 486 U.S. 578, 590 (1988) (finding death sentence based on "materially inaccurate" evidence violates Eighth Amendment); *Townsend v. Burke*, 334 U.S. 736, 740-41 (1948) (finding conviction based on "materially untrue" information violates due process "whether caused by carelessness or design")));

see also Chabot, 300 S.W.3d at 771. To be entitled to habeas relief on the basis of false evidence, an applicant must show that (1) false evidence was presented at trial; and (2) the false evidence was material to the jury's verdict. *Ex parte Weinstein*, 421 S.W.3d 656, 665 (Tex. Crim. App. 2014).

In *Ex parte Chabot*, this Court first recognized that the State's *unknowing* presentation of false testimony could violate a defendant's due process rights. 300 S.W.3d at 771. In *Ex parte Chavez*, this Court clarified that perjured testimony is not required to meet the *Chabot* standard, but rather, "[t]he question is whether the testimony, taken as a whole, gives the jury a false impression." 371 S.W.3d at 208. Indeed, "the testimony need not be strictly false. It is sufficient if the testimony, when considered in its entirety, misled the jury." *Ex parte Hightower*, 622 S.W.3d 371, 372 (Tex. Crim. App. 2021) (Hervey, J. concurring) (internal citation omitted).

2. The Chabot/Chavez standard is satisfied

a. *The State relied on false testimony*

False medical evidence was used to convince the jury that the only possible explanation for Mariah's injuries and death was abuse, and that her injuries and death could not have resulted from an accidental fall two

days prior. That evidence and argument, described in detail *supra*, is incorporated here. Ms. Lucio has shown that the testimony the State relied on to establish that Mariah's injuries and death were necessarily caused by abuse was false, misleading, and scientifically invalid.

Prevailing neuroscientific study and consensus have established there is no scientific basis for the notion that a particular facial movement or set of movements can be "read" to reveal an underlying emotional state. Ranger Escalon's testimony that he could determine Ms. Lucio's internal thoughts, emotions and guilt from her facial movements, posture, body movements and diction is scientifically baseless and false.

b. *That evidence was material*

This misleading evidence, which provided false information to the jury about the cause of Mariah's injuries, more likely than not "contributed to [Ms. Lucio's] conviction." *Chabot*, 300 S.W.3d at 771 (quoting *Ex parte Fierro*, 934 S.W.2d 370, 374-75 (Tex. Crim. App. 1996)). False or misleading testimony is deemed material if there is a "reasonable likelihood" that it affected the judgment of the jury. "[A]n applicant who proves, by a preponderance of the evidence, a due-process violation stem-

ming from a use of *material* false testimony necessarily proves harm because a false statement is material only if there is a reasonable likelihood that the false testimony affected the judgment of the jury." *Weinstein*, 421 S.W.3d at 665 (emphasis in original). The standard of materiality is the same for knowing and unknowing use of false testimony. *See Chavez*, 371 S.W.3d at 207.

Ms. Lucio has demonstrated that Dr. Farley's testimony that Mariah's injuries and death could only have resulted from intentional abuse—and that it was impossible for Mariah's injuries to have resulted from an accidental fall, as was Ms. Lucio's defense—was reasonably likely to have affected the jury's judgment. Dr. Farley's testimony that injuries to Mariah's body were unquestionably "bite marks" caused by an adult was material: claiming (falsely) that these injuries were bite marks inflicted by an adult made implausible Ms. Lucio's defense that Mariah had not been abused and died after an accidental fall—and inflamed the jury with her gruesome (and scientifically baseless) descriptions. Dr. Farley also told the jury, through her false testimony, that every injury on Mariah's body had to have been caused by intentional abuse, that those injuries could not have resulted from accidental trauma. Dr. Farley

told the jury that the absence of hemosiderin in Mariah's brain meant her head injury could not have resulted from the accidental fall two days prior; that false testimony made Ms. Lucio's defense impossible, and necessitated that her head trauma resulted from an impact within twenty-four hours of her death. Dr. Farley told the jury that bruising on Mariah's body could only have resulted from abuse; that false testimony, which ignored clear signs that Mariah was experiencing DIC (which causes extensive bruising), misled the jury into believing that Mariah had been murdered. Finally, Dr. Farley's false testimony that a healing fracture in Mariah's arm was a certain sign of child abuse was material: she used it to argue that Mariah had been abused historically. This false evidence, which resulted in the jury's guilty verdict and death sentence, was material to the State's case—cumulatively and severally.

This Court has reversed convictions when a jury was misled because an expert espoused an unreliable scientific theory or when other factors rendered an expert's testimony unreliable. *See, e.g., Ex parte Graf*, No. AP-77003, 2013 WL 1232197 (Tex. Crim. App. Mar. 27, 2013) (reversing after expert testimony deemed false because critical aspects of the testimony were disproven); *Ex parte Henderson*, 384 S.W.3d 833, 835

(Tex. Crim. App. 2012) (Price, J., concurring) (stating that due process is violated where a critical part of an expert's testimony is shown to be "highly questionable"); *id.* at 849-50 (Cochran, J., concurring) (stating that due process is violated where expert opinion on critical disputed issue is shown to be unreliable). Here, the jury was uniformly misled by the State's medical expert.

Accordingly, because Ms. Lucio has established that (1) the State relied on unreliable, misleading evidence medical evidence to obtain her conviction; and (2) the unreliable evidence was material, she is entitled to habeas relief under *Chavez*.

Likewise, Ranger Escalon's false testimony that he could determine Ms. Lucio's guilt based on her observable movements (such as facial movements, bodily movements, and body posture) more likely than not "contributed to [Ms. Lucio's] conviction." *Chabot*, 300 S.W.3d at 771 (quoting *Fierro*, 934 S.W.2d at 374-75). Ranger Escalon told the jury that his "experience in law enforcement" and his "experience in interviewing people." He expressed absolute certainty to the jury, testifying to both clarity and certainty of his ability to "read" Ms. Lucio's demeanor: "It's black and white"; "I knew she did something"; she was "hiding the truth";

and her body posture equated with the statement, "I did it." This testimony undoubtedly carried enormous weight with the jury, as it gave undue credence to Ms. Lucio's custodial statement and buttressed the State's position that Ms. Lucio's statements were a "confession" to a murder.[37] Ranger Escalon's false testimony thus infected the trial because the jury was falsely led to believe there was evidence of Ms. Lucio's guilt—tantamount to admissions—that did not exist. But Escalon's demeanor assumptions—his faulty conclusions about deception and guilt based on his analysis of Ms. Lucio's demeanor also became a self-fulfilling prophecy in that it prompted a "a presumption of guilt" which correlates to the "interrogation technique[s]" used in Ms. Lucio's interrogation and the interrogators' "level of aggressiveness towards obtaining a confession." Ex. 11 at 17 (Thompson Report). Because there is a "reasonable

[37] *See* Ex. 50 at 2 (Quintanilla Dec.) (Foreperson from Ms. Lucio's trial stating "I remember the officers used that against her. They told Melissa Lucio she was emotionless and talked about how she wasn't in tears, and how that was proof that she was guilty"); Ex. 56 at 1 (Saldivar Dec.) ("I would have wanted to hear about how Melissa's past may have affected her reaction and demeanor during the interrogation").

likelihood" that this testimony affected the judgment of the jury, *Weinstein*, 421 S.W.3d at 665, it is material and its use at Ms. Lucio's trial requires reversal of her conviction.

C. Ms. Lucio Is Entitled To A Merits Review Of This Claim Under § 5(a)(2) Because She Has Established A *Prima Facie* Showing Of Innocence

Even if the Court were to find that the claim under *Chabot/Chavez* was previously available to Ms. Lucio at the time of her prior application—and it was not—she can demonstrate actual innocence pursuant to Tex. Code Crim. Proc § 5(a)(2) and thus is entitled to a merits review of this claim, and all others contained within the instant application.

Ms. Lucio can obtain review of the merits of procedurally barred and previously raised (and rejected) claims if she makes a "threshold, prima facie showing of innocence by a preponderance of the evidence." *Ex parte Reed*, 271 S.W.3d 698, 733 (Tex. Crim. App. 2008); Tex. Code Crim. Proc. art. 11.071, § 5(a)(2).[38] Article 11.071 § 5(a)(2) adopts the U.S.

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[38] In *Ex parte Brown*, 205 S.W.3d 538, 545-46 (Tex. Crim. App. 2006), this Court suggested in *dicta* that it may not allow for review of previously adjudicated claims. However, the issue was not presented in that case. Rather, the statement was made in the context of considering whether any evidence previously presented could be part of the applicant's showing of innocence. The statutory text and the scope of *Schlup* doctrine were not considered.

Supreme Court's "gateway" actual innocence standard, as set forth in *Schlup v. Delo,* 513 U.S. 298, 321 (1995). *See Reed*, 271 S.W.3d at 733. In evaluating a *Schlup* actual innocence claim, "the habeas court must consider all the evidence, old and new, incriminating and exculpatory, without regard to whether it would necessarily be admitted under rules of admissibility that would govern at trial." *House v. Bell*, 547 U.S. 518, 538 (2006) (internal quotation marks and citation omitted).

To clear this "gateway," Ms. Lucio "must support [her] allegations of constitutional error with reliable evidence—whether it be exculpatory scientific evidence, trustworthy eyewitness accounts, or critical physical evidence—that was not presented at trial." *Reed*, 271 S.W.3d at 733. It is for Ms. Lucio to show, "in light of the new evidence, 'it is more likely than not that no reasonable juror would have" rendered a guilty verdict "beyond a reasonable doubt.'" *Id.* (quoting *Schlup*, 513 U.S. at 327).

Once an applicant makes the requisite showing under § 5(a)(2), and passes through the "gateway," the Court may then proceed to review otherwise procedurally barred or previously raised claims. *See Reed*, 271 S.W.3d at 734. Unlike § 5(a)(1), which opens up review only for a claim

where the factual or legal basis was previously unavailable, § 5(a)(2) contains no such limitation. As with the federal courts' application of § 5(a)(2) standard under *Schlup*, when an applicant makes the sufficient showing of innocence, "the interest of the prisoner in relitigating constitutional claims *held meritless on a prior petition* may outweigh the countervailing interests by according finality to the prior judgment." *Schlup*, 513 U.S. at 320 (emphasis added).

Viewed holistically, there is far more than a preponderance of evidence that Mariah died from the effects of her fall down the stairs; that Dr. Farley's testimony that Mariah could only have died from abuse and that there were adult-sized bitemarks on her body, was completely false and unscientific; and that Ms. Lucio's custodial statements were not a confession to murder, but mere regurgitations of words that armed officers fed to a vulnerable, grief-stricken, sleep-deprived, survivor of domestic abuse. She is entitled to relief under Article 11.071 § 5(a)(2).

II. CLAIM 2: PREVIOUSLY UNAVAILABLE SCIENTIFIC EVIDENCE WOULD PRECLUDE MS. LUCIO'S CONVICTION

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

Article 11.073 provides for a procedure related to certain scientific evidence that "(1) was not available to be offered by a convicted person at the convicted person's trial; or (2) contradicts scientific evidence relied on by the state at trial." Tex. Code Crim. Proc. art. 11.073(a). The Court may grant relief on an application for a writ of habeas corpus filed in the manner provided for by, *inter alia*, Article 11.071.

> The application must contain specific facts indicating that:
>
> > (A) relevant scientific evidence is currently available and was not available at the time of the convicted person's trial because the evidence was not ascertainable through the exercise of reasonable diligence by the convicted person before the date of or during the convicted person's trial; and
> >
> > (B) the scientific evidence would be admissible under the Texas Rules of Evidence at a trial held on the date of the application; and
> >
> > (2) the court makes the findings described by Subdivisions (1)(A) and (B) and also finds that, had the scientific evidence been presented at trial, on the preponderance of the evidence the person would not have been convicted.

Id. art. 11.073(b).

Because this is a subsequent application, Ms. Lucio must also show that "a claim or issue could not have been presented previously in an original application" because it is "based on relevant scientific evidence that was not ascertainable through the exercise of reasonable diligence

by the convicted person on or before the date on which the original application or a previously considered application, as applicable, was filed." *Id.* art. 11.073(c). In making the determination

> as to whether relevant scientific evidence was not ascertainable through the exercise of reasonable diligence on or before a specific date, the court shall consider whether the field of scientific knowledge, a testifying expert's scientific knowledge, or a scientific method on which the relevant scientific evidence is based has changed since:
>
> (1) the applicable trial date or dates, for a determination made with respect to an original application; or
>
> (2) the date on which the original application or a previously considered application, as applicable, was filed, for a determination made with respect to a subsequent application.

Id. art. 11.073(d).

Article 11.073 took effect on September 1, 2013 and was thus unavailable when Ms. Lucio's prior state habeas application filed. Therefore, Article 11.073 provides a new "legal basis" for the claim that new scientific evidence establishes by a preponderance of the evidence that she would not have been convicted, and Article 11.071(5)(a)(1) authorizes the litigation of this claim in the instant application.[39]

[39] Litigation of this claim is also proper because the factual basis of the claim was unavailable at the time of the last state habeas application. The new consensus in the scientific community—that bite mark evidence is invalid—was

A. New Evidence Proves That The Bite Mark Evidence Used Against Ms. Lucio Is Scientifically Invalid

1. Current scientific understanding of the invalidity of bite mark evidence was unavailable at the time of trial, and it contradicts scientific evidence on which the State relied

The scientific evidence at issue here "was not available to be offered by a convicted person at the convicted person's trial" *and* it "contradicts scientific evidence relied on by the state at trial." Tex. Code Crim. Proc. art. 11.073(a). Either is a basis for granting relief. The new scientific understanding, described in Dr. Freeman's sworn statements submitted with this application, did not emerge until well after Ms. Lucio's 2008 trial. *See* Ex. 6 (Freeman Dec.).

At trial, the State's medical examiner, Dr. Farley, testified that marks on Mariah's body were determined to be bite marks. Since the time of trial, new scientific consensus has established that the testimony here—identifying an injury as a bite mark—is foundationally invalid and unreliable. As previously stated, the National Academy of Science (NAS), the Texas Forensic Science Commission, and the President's

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unavailable to form the factual predicate of a due process claim when Ms. Lucio's initial or subsequent pro se state habeas petitions were filed.

Council of Advisors on Science and Technology, supported by numerous scientific studies from board certified odontologists, have established that there *is no scientific validity* to identifying a patterned injury as human bite mark, as Dr. Farley did at Ms. Lucio's trial. For example, the 2009 NAS report found that bite mark evidence is scientifically invalid, grossly subjective, and especially prone to the influence of cognitive bias.[40] In 2015, leading forensic odontologists—including Dr. Freeman, then the American Board of Forensic Odontology president—conducted a study that demonstrated the fundamental unreliability of bite mark analysis, revealing that expert testimony which conclusively identifies an injury as a human bite mark is in fact without a scientific basis. *See* Ex. 6 at 9-11 (Freeman Dec.). In that study, *none* of the 100 case studies resulted in unanimous agreement among board-certified examiners regarding which injuries could be characterized as human bite marks. *Id.* The study established that the "discipline" of bite mark analysis was "unreliable from the outset." *Id.* And in 2016, the President's Council of Advisors on Science and Technology concluded that "available scientific

[40] Strengthening Forensic Science in the United States: A Path Forward at 176 ("NAS Report"), available at https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf.

evidence strongly suggests that examiners cannot consistently agree on whether an injury *is* a human bite mark and cannot identify the source of bite mark with reasonable accuracy."[41] As a result, the Council found "the prospects of developing bite mark analysis into a scientifically valid method to be" so low that it "advise[d] against devoting significant resources to such efforts."[42]

In 2015, in response to the exoneration of a Texas man who had been wrongfully convicted based on bite mark analysis,[43] the Texas Forensic Science Commission undertook a year-long investigation and issued a report in 2016 recommending a moratorium on the use of bite mark evidence in all criminal cases in the state of Texas.[44] Unless and

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[41] Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods at 87, available at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf.

[42] *Id*.

[43] After having spent twenty-eight years wrongfully incarcerated, in 2018, the Texas Court of Criminal Appeals found that Steven Mark Chaney was "actually innocent" of a 1987 murder conviction that had been procured based primarily upon faulty bite mark testimony. *Chaney*, 563 S.W.3d at 258 (observing that bite mark evidence, "which once appeared proof positive of . . . guilt, no longer proves anything").

[44] *See* Forensic Bitemark Comparison Complaint Filed by National Innocence Project on Behalf of Steven Mark Chaney—Final Report (Apr. 12, 2016), available at https://www.txcourts.gov/media/1440871/finalbite markreport.pdf.

until research and "rigorous and appropriately validated proficiency testing" can establish reliable criteria for "identifying when a patterned injury constitutes a human bite mark" and for "identifying when a human bite mark was made by an adult versus a child," the Commission concluded such analysis was too unreliable to be used in court.[45]

Ms. Lucio has thus satisfied the requirements of Article 11.073(a).

2. The relevant scientific evidence was not ascertainable through the exercise of reasonable diligence when Ms. Lucio's previous habeas applications were filed

The new scientific evidence presented in this application was not ascertainable through the exercise of reasonable diligence when Ms. Lucio's former habeas counsel filed Ms. Lucio's initial application under Article 11.071 in 2011. As explained above, the new scientific understanding has been steadily evolving. Fundamental changes suggested by Dr. Freeman's research did not begin to take root in any way until well after

[45] *Id.* at 15-16. It is also worth noting that any bite mark analysis purporting to distinguish adult from child bite marks is particularly unreliable. Dr. Freeman explains that because "a human's dental arch may be fully developed when a child is as young as eight years old, with some, minimal, increase until age thirteen," "there is no reliable way to measure a circular or half-mooned abrasion and determine whether it is attributable to an adult's dentition, as compared to [a] child's." Ex. 6 at 11-12 (Freeman Dec.). Dr. Farley's testimony that the "bite marks" were attributable to an adult is therefore "scientifically indefensible." *Id.* at 11.

2011. The 2009 NAS report was the first critical step in the evolution of this science debunking the unvalidated forensic discipline of bite mark analysis, but scientific evidence and consensus to not take hold until 2016 when the Texas Forensic Science Commission completed its year-long investigation and issued a report recommending a moratorium on the use of bite mark evidence in all criminal cases in the state of Texas, and when, simultaneously, the President's Council of Advisors on Science and Technology concluded bite mark analysis lacked foundational validity. Ex. 6 at 3-8 (Freeman Dec.).

3. The new scientific evidence would be admissible under the Texas Rules of Evidence

The relevant scientific evidence contradicting the evidence on which the State relied at trial is admissible under the Texas Rules of Evidence. First, the relevant scientific evidence here would operate to demonstrate that a court would be required to exclude the Dr. Farley's opinion evidence about the bite mark under Rule 702 today. Dr. Freeman's testimony would clearly be admissible to demonstrate that the

opinion Dr. Farley expressed at trial was insufficiently reliable to be admissible under *Kelly v. State*, 824 S.W.2d 568 (Tex. Crim. App. 1992).[46] The Court of Criminal Appeals has held that this new scientific evidence demonstrates that forensic odontological opinions that a particular individual generated an injury thought to be a bite mark with his or her dentition are no longer admissible under the Texas Rules of Evidence. *Chaney*, 563 S.W.3d at 256 (adopting trial court conclusion that "such testimony would not be . . . admissible" today).

Testimony such as that provided by Dr. Freeman would also be admissible at trial to impeach any odontological opinion that were admitted (whether erroneously or not). This Court recognized the admissibility of this type of evidence in *Chaney*. 563 S.W.3d at 257 (adopting trial court finding that "the current scientific evidence related to bite marks," i.e.,

[46] In *Chanthakoummane v. State*, No. AP-75,794, 2010 WL 1696789 (Tex. Crim. App. 2010) (not designated for publication), the Court of Criminal Appeals applied the *Kelly* test under an abuse of discretion standard. *Id.* at *23. The CCA recently authorized an application under Texas Code of Criminal Procedure article 11.073 challenging the bite mark comparison opinion testimony in this case. *See Ex parte Chanthakoummane*, No. WR-78,107-02, 2017 WL 2464720, at *1 (Tex. Crim. App. June 7, 2017) (not designated for publication).

recent scientific studies, "would be admissible under the Texas Rules of Evidence").

4. Without the bite mark opinion evidence, Ms. Lucio would not have been convicted

Without the discredited bite mark opinion testimony on which the State relied, it is more likely than not that Ms. Lucio would not have been convicted. Article 11.073 reformed the prejudice standard so that relief based on new science may be obtained by showing that, by a preponderance of the evidence, the applicant would not have been convicted if the new scientific evidence had been presented. Tex. Code Crim. Proc. art. 11.073, § (b)(2).

As in *Chaney*, "[t]he State's case would have been incredibly weakened had [the] newly available scientific evidence been presented at trial" and the expert's testimony about the presence of an alleged bite mark was no longer allowed to be heard. Dr. Farley testified falsely and without basis in science that Mariah had "bite marks" on her body, and that those marks were signs she had been abused. Dr. Farley offered extensive testimony of these purportedly "obvious" bite marks on Mariah's right back, characterizing them, vividly and shockingly, as "like dragging of the teeth across the back." 34 RR 17; *see also id.* (characterizing it as a

"big bite!" and "painful injury," "with raking, where it just pulls flesh off of the back"). Dr. Farley buttressed her testimony with the opinion of a forensic odontologist (who did not testify or provide a report), but who, according to Dr. Farley, told her "they're bite marks," making her claim certain to the jury. 34 RR 33. Dr. Farley also opined that the "bite marks" were "adult size[d]," thereby excluding the possibility that the purported bites were made by a child or teenager, by anyone other than Ms. Lucio. *Id*. And in the penalty phase of the trial, Dr. Farley testified that the bite marks were evidence of battered child syndrome, that there were "at least two bite marks" on Mariah's back, that these would be painful because "the teeth were dragged along the skin and caused abrasions," and that the injuries resulted from "[v]ery, very forceful biting." 37 RR 156-67. This testimony negated Ms. Lucio's defense that Mariah died after an accidental fall. Biting—especially as described by Dr. Farley, as being caused with great force and resulting in great pain—by its very nature is an act of depraved, intentional violence. Dr. Farley's false testimony that certain abrasions on Mariah's body were bite marks made Ms. Lucio, in the eyes of the jury, animalistic and deliberately violent. Without that testimony, without the jury being told (falsely) that there

were adult-sized bite marks on Mariah's body, Ms. Lucio's defense—that her injuries and death resulted from medical complications after an accidental fall—was entirely plausible.

Based on the current scientific understanding of the invalidity of bite mark evidence, Ms. Lucio is entitled to relief under Article 11.073.

B. New Evidence Regarding "Forensic Confirmation Bias" Further Undermines Dr. Farley's Conclusions About Mariah's Cause Of Death

Since the time of Ms. Lucio's previously filed application under Article 11.071, there has been an emergence of new scientific studies demonstrating the impact of "confirmation bias" on forensic pathologists, revealing that cause-of-death decisions—like the findings rendered by Dr. Norma Jean Farley in this case—are routinely influenced by medically-irrelevant, biasing information, such as a confession.[47] *See generally* Mohammed A. Almazrouei et al., *The forensic disclosure model: What should be disclosed* to*, and* by*, forensic experts?* 59 Intl. Journal of Law,

[47] Sources of confirmation bias include: "something about th[e] case" itself, like a confession; something particular to the forensic analyst's "experience, their personality, their working environment, their motivation, etc.[,]"; as well as biases that "arise from human nature, the very cognitive architecture of the human brain that we all share, regardless of the specific case or the specific person doing the analysis." Itiel E. Dror, *Cognitive and Human Factors in Expert Decision Making: Six Fallacies and the Eight Sources of Bias,* 92 Analytical Chemistry 7998, 7999 (2020).

Crime & Justice 1, 1 (Dec. 2019) (explaining that, in recent years, "[a] growing body of empirical research has demonstrated the existence of biases in forensic expert decision making across forensic domains[.]"). This new scientific evidence is critical here because, before conducting Mariah's autopsy, Dr. Farley was told that Ms. Lucio had "confessed" to abusing Mariah, and Dr. Farley was accompanied in the autopsy suite by two of the interrogating officers who had already determined that Ms. Lucio had killed Mariah by physical abuse without any scientific basis to do so.

"Forensic confirmation bias" is defined as a "class of effects through which an individual's preexisting beliefs, expectations, motives, and situational context influence the collection, perception, and interpretation of evidence during the course of a criminal case." Saul M. Kassin, et al., *The Forensic Confirmation Bias: Problems, Perspectives, And Proposed Solutions*, 2 Journal of Applied Research in Memory and Cognition 42, 45 (2013); *see also* Baylee D. Jenkins, et al., *Testing the Forensic Confirmation Bias: How Jailhouse Informants Violate Evidentiary Independence*, Journal of Police and Criminal Psychology, at *2 (2021) (noting that

"research has found that contextual information can change the perceptions of . . . forensic experts in their analyses of forensic evidence") (internal citation omitted). The existence of forensic confirmation bias has now been seen across a variety of forensic disciplines, including DNA analysis and even one of the "most objective" forensic domains: toxicology. Dror, *Cognitive and Human Factors in Expert Decision Making*, at 7998. Forensic confirmation bias is implicit, unintentional and, as such, cannot be controlled or willed away by the practitioner. *Id.* at 7999 (explaining that "no one is immune to bias, not even experts. In fact, in many ways, experts are more susceptible to certain biases. The very making of expertise creates and underpins many of the biases."). Although unintentional, the impact of biasing information can pervade every aspect of the forensic process, as it has been shown to even "impact the actual *observation* and *perception*" of the relevant data or evidence, as well as "testing strategies." *Id.* at 7998 (emphasis added).

Groundbreaking scientific studies and archival analyses have been conducted in the last several years, providing evidence that diagnostic decisions by forensic pathologists are regularly impacted by "domain ir-

relevant" information. This information can include a wide range of contextual information, such as pressure to close a case or knowledge that a suspect has confessed. Itiel Dror et. al., *Cognitive bias in forensic pathology decisions*, 66 Journal of Forensics Science 1751, 1751 (2021); *see also* Saul M. Kassin et al., *Confessions that Corrupt: Evidence From the DNA Exoneration Case Files*, 23 Psychological Science 41, 43 (2012) (explaining that a review of wrongful convictions involving false confessions revealed that confessions have the power to "corrupt[] . . . expert witnesses"). Further, in 2021, for the first time, research was conducted that demonstrated "biases in manner of death determinations among forensic pathologists" who, when provided medically-irrelevant, prejudicial information, were more likely to opine that a child's death was a homicide. Dror et al., *Cognitive bias in forensic pathology,* at 5.

These novel scientific findings provide new evidence that the interrogating officers' presence in the autopsy suite and Dr. Farley's knowledge of Ms. Lucio's admissions had the potential to change Dr. Farley's subsequent cause-of-death determination and undermined the reliability of her corresponding trial testimony. *Id.* at 4 (explaining that the

study found that pathologists' "decisions were noticeably affected by medically irrelevant contextual information (information that should not have any bearing on the decision)"). The science discussed above suggests that Dr. Farley's knowledge that Ms. Lucio took responsibility for Mariah's injuries during interrogation likely impacted her perception and observations while conducting the autopsy, as well as her testing process and her ultimate conclusions. *See* Dror, *Cognitive and Human Factors*, at 8001 (explaining how knowledge that the suspect confessed can bias the forensic process and the practitioner's conclusions). Indeed, the officers' very presence during the autopsy likely put implicit pressure on Dr. Farley to confirm the officers' presumptions about Mariah's death and Ms. Lucio's guilt and, in turn, may have caused her to fail to "properly confirm[] [her] results, or [neglect to] consider alternatives." *Id.* This is supported by the fact that Dr. Farley failed to conduct relevant testing or investigation that is required to reliably establish a diagnosis of abuse. *See* Ex. 4 at 5 (Ophoven Dec.).

1. New science on forensic confirmation bias was not ascertainable at the time of Ms. Lucio's prior habeas application

This new evidence, which undermines Dr. Farley's cause-of-death determination, was not "ascertainable through the exercise of reasonable diligence," prior to 2011. Tex. Code Crim. Proc. art. 11.073(c). Indeed, the very term used to describe this phenomenon of how case information impacts purportedly objective, scientific decisions in the forensic context—"forensic confirmation bias"—was not even established until 2013. *See* Jeff Kukucka & Itiel E. Dror, *Human factors in forensic science: psychological causes of bias and error*, *in* The Oxford Handbook of Psychology and Law 1, 5 (David DeMatteo & Kyle C. Scherr eds., 2022) (citing Kassin, et al., *The forensic confirmation bias*, at 44). Although there were generalized studies about implicit bias and a small number of studies regarding the impact of bias on fingerprint examiners' conclusions,[48] before 2011, scientists had not conducted empirical research on the impact

[48] *See, e.g.*, Itiel E. Dror et al., *When Emotions Get the Better of Us: The Effect of Contextual Top-down Processing on Matching Fingerprints*, 19(6) Applied Cognitive Psych. 799 (2005); Itiel E. Dror, *Contextual information renders experts vulnerable to making erroneous identifications*, 156(1) Forensic Science International 74 (2006); Glenn Lagensberg, *Testing for Potential Contextual Bias Effects During the Verification Stage of the ACE-V Methodology when Conducting Fingerprint Comparisons*, 54(3) Journal Forensic Science 571 (2009); David Charlton et al., *Emotional Experiences and Motivating Factors*

of biasing information on *pathologists* nor the impact of confession evidence on forensic experts. *See* Jeff Kukucka & Saul M. Kassin, *Do Confessions Taint Perceptions of Handwriting Evidence? An Empirical Test of the Forensic Confirmation Bias*, 38:3 Law & Hum. Behav. 256 (2014). And, as noted, the 2021 empirical study regarding the impact of medically irrelevant information upon the cause-of-death determination of forensic pathologists was the first of its kind. Dror et al., *Cognitive bias in forensic pathology decisions,* at 5 (noting that the study is the "first to establish cognitive bias in forensic pathology decisions").

2. Expert testimony regarding forensic confirmation bias is admissible in Texas Courts

This new evidence regarding forensic confirmation bias is admissible in Texas courts today through the testimony of a relevant expert. *See* Tex. R. Evid. 702 (permitting the testimony of a witness "who is qualified as an expert by knowledge, skill, experience, training, or education [to] testify in the form of an opinion or otherwise if the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue"); *accord United*

Associated with Fingerprint Analysis, 55(2) Journal of Forensic Science 385 (2010).

States v. Walker, 974 F.3d 193, 200 (2d Cir. 2020), *cert. denied*, 141 S. Ct. 2823 (2021) (noting the admission of Dr. Itiel Dror's expert trial testimony regarding "the manner in which cognitive and other biases can lead fingerprint examiners to reach inaccurate conclusions").

3. Had the scientific evidence regarding Dr. Farley's bias, along with the other new science, discussed above, been presented at trial, Ms. Lucio would not have been convicted

Because this new science on forensic confirmation bias was not reasonably ascertainable at the time of the previous filing, is admissible in Texas courts today, and because—along with the other newly available science that demonstrates the falsity of critical aspects of Dr. Farley's testimony—this newly available science, had it been presented at trial, on the preponderance of the evidence, Ms. Lucio would not have been convicted. She is thus entitled to relief pursuant to Tex. Code Crim. Proc. art. 11.071, § 5(a)(1); 11.073(b)(2)(B).

C. New Scientific Evidence Proves That Ms. Lucio Was At Very High Risk Of Falsely Confessing

Mere hours after her daughter died, Ms. Lucio was taken to a police station, isolated from her grieving family, and interrogated for over five hours by multiple members of law enforcement, several of whom were armed. They impliedly threatened to "*beat [her] half to death*," Ex. 10 at

27 (Gudjonsson Report), repeatedly screamed at her that she "*ha*[*d*] *to know*" what happened, *id.* at 29, insisted that she looked like a "*cold-blooded killer*," *id.* at 30, and refused to accept her repeated assertions—over *one hundred* separate times—that she did not harm her daughter, *id.* at 25, 29; Ex. 11 at 24 (Thompson Report). This grueling interrogation went on for hours. *See* Ex. 10 at 6 (Gudjonsson Report) (describing interrogating officers' "manipulative ploys" in service of their "guilt presumptive endeavor" with the objective to "increas[e] [Ms. Lucio's] willingness" to confess).

Before an inculpatory word was uttered, an armed Texas Ranger came into the room, got within inches of Ms. Lucio's face, and insisted, as Ms. Lucio sobbed, that there was a "lot of evidence . . . that's not going to look good" in the capital murder case against her. *Id.* at 38. He then offered Ms. Lucio a way out; he would "help" her "put this to rest" if she confessed to what he claimed to "know"—that Ms. Lucio was responsible for her daughter's death. *Id.* at 37. Continuing to insist that she did not know how Mariah died, Ms. Lucio nonetheless began to make incriminating statements as Ranger Escalon encouraged her to go further—telling her she was doing "so good" when she inculpated herself. *Id.* at 38, 42.

Revealing her high level of suggestibility, when asked to explain why she purportedly harmed her daughter, Ms. Lucio parroted back the language that had been suggested to her, saying she "guess[ed]" it was "[f]rustration"—precisely what officers *told her* was her motivation *thirteen* times before. *Id.* at 41. At 3:00 am, after having been apparently coached off-camera,[49] Ms. Lucio took responsibility for specific visible injuries on her daughter's body and complied with the interrogating officer's instructions to demonstrate the alleged abuse on a doll—a tactic that has been repeatedly utilized in cases involving false confessions from innocent caregivers.[50]

False confessions elicited by guilt-presumptive police interroga-

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[49] Ms. Lucio's 3:00 a.m. statement occurred after officers inexplicably turned off the video camera for nearly 90 minutes. During that time, they apparently continued to "groom" Ms. Lucio in advance of her final on-camera admissions; Ranger Escalon tells Ms. Lucio when the camera first turns on that they had "talked about" this reenactment before—that "talk" about the reenactment was not recorded. Ex. 10 at 48 (Gudjonsson Report); *id.* at 9 (indicating that there is "evidence of a prior enactment discussion [grooming] process").

[50] *See, e.g.*, *State v. Eskew*, 390 P3d 129, 136 (Mont. 2017) (mother wrongfully convicted after interrogators gave her a doll to demonstrate what she had purportedly done to the child and insisted that she make the doll's head rock); *People v. Thomas*, 22 N.Y.3d 629 (2014) (father wrongfully convicted after interrogators pressured him to demonstrate how, according to the officers, he threw his son down to cause the injuries).

tions—like the interrogation at issue here, which bore all of the characteristics of the now-controversial "Reid Technique"[51]—are a primary cause of wrongful conviction in the United States, contributing to nearly *one-third* of all known wrongful convictions underlying the nation's DNA exonerations.[52] Such false confessions are of particular concern in cases like Ms. Lucio's, in which a parent is interrogated "immediately after a

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[51] Named after one of its founders, John E. Reid, the Reid technique has been the "most widely publicized and probably most widely used" interrogation method in the United States since its inception in the 1960s. Miriam S. Gohara, *A Lie for A Lie: False Confessions and the Case for Reconsidering the Legality of Deceptive Interrogation Techniques*, 33 Fordham Urb. L.J. 791, 808 (2006); *see also* Saul M. Kassin et al., *Police-Induced Confessions: Risk Factors and Recommendations*, 34 Law Hum. Behav. 3 (2010) at 7 (describing Reid as the "most influential approach" to modern police interrogation). The Reid method instructs officers to isolate the suspect in a "small private room, which increases his or her anxiety and incentive to escape[,]" and then engage in a nine-step process in which maximization and minimization techniques, like those used against Ms. Lucio, are embedded—with the intention to "lead suspects to see confession as an expedient means of escape." *Id*. Today, the Reid method is sufficiently controversial due to its outsized role in producing false confessions that "a consulting group that . . . has worked with a majority of U.S. police departments, said . . . it will stop training detectives in the [Reid] method" and will now "use the Reid technique only to educate police on the risk and reality of false confessions." Eli Hager, *The Seismic Change in Police Interrogations: A major player in law enforcement says it will no longer use a method linked to false confessions* The Marshall Project (Mar. 7, 2017), https://tinyurl.com/5zxfybru (discussing Wicklander-Zulawski's decision to stop training officers to use the Reid technique).

[52] *See* Innocence Project, *DNA Exonerations in the United States* (accessed Mar. 15, 2022), https://www.innocenceproject.org/dna-exonerations-in-the-united-states/. As experts caution, these proven false confessions "most surely represent the tip of an iceberg." Kassin et al., *Police Induced Confessions*, at 3.

child's death . . . [when they] may be particularly vulnerable to suggestion, manipulation or memory lapses."[53] Indeed, data regarding the known wrongful convictions of women in the United States reveals that false confessions are particularly prevalent in cases like Ms. Lucio's, in which a woman is accused of murdering a child. *See*, *e.g.*, Jackson, K., & Gross, S., *Female exonerees: Trends and patterns*, The National Registry of Exonerations (Sept. 27, 2014), https://www.law.umich.edu/special/exoneration/Pages/Features.Female.Exonerees.aspx.).[54]

Two experts on false confession have confirmed that Ms. Lucio was uniquely vulnerable to the coercive interrogation techniques weaponized against her immediately after the death of her child, because of her history of significant trauma and corresponding mental health issues, cog-

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[53] Keith A. Findley et al., *Shaken Baby Syndrome, Abusive Head Trauma, and Actual Innocence: Getting it Right*, 12 Hous. J. Health L. & Pol'y 209, 257-60 (2012).

[54] Specifically, "women are nearly twice as likely as men to be wrongfully convicted of child homicide (30% vs. 16%), and three times as likely as men to be wrongfully convicted of crimes that never occurred (63% vs. 21%)." Ex. 12 at 5 (Guarnera Dec.). Further, "[i]n over half (56%) of these no-crime exonerations of women, the supposed victims were children[,] [and] in one out of seven formal exonerations of women, the woman was accused of murdering a child who in reality died of an unrelated accident or undiagnosed pathology." *Id*.

nitive deficits, and high levels of suggestibility and compliance—all exacerbating the risk posed to her by the officers' relentless psychological manipulation. Applying the current scientific body of evidence, two experts on false confessions—police trainer and interrogation expert David Thompson, and one of the world's leading experts on false confessions Dr. Gisli Gudjonsson[55]—analyzed Ms. Lucio's interrogation and concluded that Ms. Lucio's case presents a "very high" risk of false confession because the "number, severity, and combination of the risk factors involved during [her] lengthy interrogation are *exceptional*." Ex. 10 at 16 (Gudjonsson Report); *see also* Ex. 11 at 25 (Thompson Report) (concluding that there is a "high likelihood" her interrogation produced a false confession). However, the scientific evidence necessary to fully assess Ms. Lucio's "exceptional" risk for false confession was not previously available as, "[u]ntil recently, the impact of trauma, particularly history of sexual abuse, has been largely unrecognized as a salient risk factor to false con-

[55] Dr. Gudjonsson is a former police officer and clinical psychologist. He has authored numerous books and articles on the subject of false confessions and is a coauthor of the American Psychology-Law Society's 2010 White Paper on false confessions. *See* Kassin et al., *Police Induced Confessions.*

fession." *Id.* at 12. Indeed, "trauma exposure was included as an empirically-supported risk factor for false confessions in an authoritative text for the first time in 2018." Ex. 12 at 2 (Guarnera Dec.).

The jury that convicted Ms. Lucio of capital murder and sentenced her to death was presented with essentially no science about the psychological manipulation involved in her interrogation, the risk that such interrogation tactics could produce a false confession, or Ms. Lucio's unique and profound vulnerabilities to the manipulative police coercion due to her lifelong history of trauma. Rather, the jurors watched the prejudicial video-taped statements, heard false and unchallenged testimony that Ms. Lucio's demeanor was indicative of her guilt, and heard the prosecution argue that the confession evidence conclusively proved that "[Ms. Lucio] is the one that did it and no one else." 36 RR 21. Without any explanation regarding the new science that explains Ms. Lucio's heightened risk for false confession, Ms. Lucio's jurors were undoubtedly swayed by her custodial statements, allowing for her wrongful conviction to take shape.

As discussed *infra*, Ms. Lucio is entitled to merits review and ultimate relief under Tex. Code Crim. Proc. art. 11.071, § 5(a)(1), because at

the time of her trial and any previous application under Article 11.071, significant aspects of the social science necessary for a full analysis of Ms. Lucio's risk of false confession was not "ascertainable through the exercise of reasonable diligence," Tex. Code Crim. Proc. art. 11.073(c); such evidence is now recognized by this Court, and courts around the nation, as admissible and material; and, had this new scientific evidence—which undermines the prosecution's primary evidence against her—been presented at Ms. Lucio's trial, Ms. Lucio would more likely than not have been acquitted of the capital murder charge. Accordingly, Ms. Lucio must be granted a new trial. Tex. Code Crim. Proc. art. 11.073 § (b)(2).

1. New scientific evidence demonstrates that Ms. Lucio was uniquely susceptible to false confession due to her lifelong history of trauma

Today, there is a robust body of social science research identifying and providing empirical data on the risk factors that lead innocent people to implicate themselves in crimes. These risk factors—an exceptional number of which are implicated in this case—are categorized broadly into "dispositional" characteristics of the confessor, and "situational" circumstances of the interrogation itself, such as police conduct and the environment in which the interrogation occurred. *See* Kassin et al., *Police-*

Induced Confessions at 16-23. Since the time of Ms. Lucio's trial, new scientific evidence regarding an additional "dispositional" risk factor has emerged—namely, trauma as a risk factor for false confession.

a. *Trauma, which Ms. Lucio endured, is a risk factor for false confession*

As a direct consequence of a life marked by physical, emotional, and sexual abuse, *see* Ex. 14 (Brand Dec.), we now know that, while subjected to a lengthy, coercive interrogation, Ms. Lucio was extremely vulnerable to the officers' relentless interrogative pressure. Ex. 10 at 17 (Gudjonsson Report). At the time of Ms. Lucio's 2008 trial, it was not yet understood that severe trauma, like Ms. Lucio endured throughout her life, places innocent people at an increased risk of falsely confessing. Ex. 12 at 6 (Guarnera Dec.).

In recent years, scientific research has revealed that "a history of negative/traumatic life events is associated with increased level of suggestibility, compliance, and false confession[,] . . . because trauma significantly reduces the *resilience* of the trauma victims to cope with *interrogative pressure*." Ex. 10 at 11, 12 (Gudjonsson Report). More specifically, recent scientific evidence demonstrates the correlation between a history of trauma and a trauma survivor's heightened levels of suggestibility,

meaning "vulnerability to external suggestion," and compliance, meaning "tendency to acquiesce to requests or demands"—both of which increase a person's risk of false confession. Ex. 12 at 7 (Guarnera Dec.). Further, "recent advances in neuroscience continue to pinpoint the types of cognitive and functional deficits that typically result from trauma exposure, particularly chronic exposure early in development, such as Ms. Lucio reportedly experienced." *Id.* at 6.

In addition to the new, relevant empirical and neurological studies, data that first became available in 2014 shows that "a woman accused of murdering a child may be particularly vulnerable to wrongful conviction—including, potentially, due to false confession." *Id.* at 5. Likewise, an archival study that began in 2015, examining the known cases of false confessions elicited from women in the United States—including women who were domestic violence survivors—provides, for the first time, real-world evidence for the link between trauma experienced by survivors of domestic abuse, like Ms. Lucio, and elevated risk of false confession. *Id.*

Moreover, in 2020, for the first time, scholars explained why survivors of domestic abuse in particular, like Ms. Lucio, are likely to acquiesce in the face of a coercive interrogation due to the striking "parallels

between the psychodynamics of intimate terroristic domestic violence [a form of domestic abuse] and the discursive structure of the Reid method of police interrogation." Ex. 12 at 4 (Guarnera Dec.) (quoting Janet Ainsworth, *When police discursive violence interacts with intimate partner violence: Domestic violence as a risk factor for police-induced false confessions*, 8(1) Language & Law 10, 16-17 (2020). "Intimate terrorist domestic violence is about control over the victim of the violence; Reid-style interrogation [like Ms. Lucio experienced] is premised on the interrogator maintaining complete control over the physical and discursive aspects of the interrogation." *Id.* More specifically:

> The more we learn about survivors of intimate terrorist domestic violence, the more obvious it becomes that ***the use of the Reid method of interrogation—particularly when wielded by male police officers—simply recapitulates the psychodynamics of domestic abuse***. It cannot be a surprise, then, if the victim of intimate terroristic domestic violence turns to one of the very coping mechanisms [accommodating and conforming to the wishes of the violent partner] that enable her continued day-to-day survival when she is confronted with police practices that so closely mirror the dynamics of intimate terrorism. Indeed, if you set out to develop an interrogation method that would perfectly replicate the psychodynamics of intimate terroristic domestic violence, it would look a lot like the techniques of Reid interrogation described here.

Id. at 4-5.

As a result of the novel empirical research,[56] recent archival analyses of wrongful convictions of women, and advances in "knowledge of the neurodevelopmental deficits associated with trauma exposure," Ex. 12 at 5 (Guarnera Dec.), experts have just recently concluded that individuals like Ms. Lucio, who have endured trauma, have a significant, categorical vulnerability to interrogative pressure and, therefore, suggest that trauma be deemed a "dispositional" risk factor for false confession. Hayley M. D. Cleary, et al., *How Trauma May Magnify Risk of Involuntary and False Confessions Among Adolescents*, 2:3 Wrongful Conviction Law Review 173, 184 (2021); *see also* Megan Glynn Crane, *Childhood's Trauma Lurking Presence in the Juvenile Interrogation Room and the Need for a Trauma-Informed Voluntariness Test for Juvenile Confessions*,

[56] Consistent with this new science demonstrating how individuals with a history of trauma and, particularly, women who have experienced domestic abuse have an increased risk of false confession, police officers around the nation have increasingly adopted new methods for interrogating survivors of trauma that differ starkly from the manner in which Ms. Lucio was interrogated. Ex. 11 at 12-13 (Thompson Report) (explaining that new "[e]vidence-based interviewing approaches"—which "emphasize the use of open-ended questioning and the withholding of evidence[,] [and] . . . advocate against the use of" coercive interrogation techniques, like those used against Ms. Lucio—"have rapidly expanded across the globe over the last several years[.]").

62(3) South Dakota L. Rev. at 631 (2017).

b. *Ms. Lucio is a survivor of significant trauma and, therefore, is particularly vulnerable to interrogative pressure*

This new science is of particular importance to assessing the reliability, or lack thereof, of Ms. Lucio's purported "confession," as Ms. Lucio has endured significant trauma throughout her life. Ms. Lucio's experience as a survivor of trauma and violent domestic abuse was undoubtedly a critical factor in her reluctant acquiescence to the interrogators' demands that she implicate herself in Mariah's death.[57] Ms. Lucio's recent

[57] Ms. Lucio's trial attorney recognized that her affect during interrogation and apparent compliance with interrogating officers were likely impacted by her history of abuse, and thus proffered the testimony of two experts—social worker Norma Villanueva and psychologist Jonathan Pinkerman—who would have testified that Ms. Lucio's demeanor and her incriminating statements during the interrogation reflected her acquiescence to aggressive, male authority figures, and did not indicate guilt. The experts would have testified to aspects of her "psychological functioning" in order to explain "how her demeanor, both immediately after the incident and during the interrogation, may be understood by understanding and appreciating the psychological elements and previous history and background that she has lived through" and thereby provide an alternate explanation for her demeanor and incriminating statements than that presented by the State. *Lucio v. Lumpkin*, 987 F.3d 451, 457 (5th Cir. 2021), *cert. denied*, 142 S. Ct. 404 (2021). Neither expert, however, was apparently qualified to, or would have testified about, the phenomenon of false confessions and the scientifically established risk factors for false confession. Indeed, the seminal "White Paper" on false confessions, commissioned by the American Psychology Law Association, which firmly established the taxonomy of "dispositional" and "situational" risk factors, was not yet published at the time of trial. *See* Kassin et al., *Police-Induced Confessions*, at 16-23. Moreover,

examination by clinical psychologist Dr. Bethany Brand—an internationally-recognized expert on trauma-related disorders, who conducted assessments to determine Ms. Lucio's level of trauma and the impact of such trauma on her psychological health and cognition—reveals the profound impact that Ms. Lucio's lifetime of abuse had upon her response to the interrogation. Ex. 14 (Brand Dec.).

Dr. Brand found that Ms. Lucio "experienced an 'extreme' level of childhood sexual abuse within [her] family[,] severe to extreme emotional neglect[,] . . . [and] a severe level of emotional abuse within her family." *Id.* at 14. Dr. Brand found that, in light of her trauma, it is not surprising that Ms. Lucio has observable symptoms of "chronic PTSD."[58] *Id. at* 15.

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as Dr. Brand notes, "[a]lthough Ms. Lucio's defense attorney proffered the expert testimony of two witnesses who, if permitted, would have testified to their opinion that her 'flat' affect during the interrogation was due to her history of abuse, no expert [at the time of trial] assessed Ms. Lucio for compliance to authority, particularly male authority figures, or used any of the validated measures of dissociation to scientifically assess her tendency to dissociate, that is, to have periods of emotional numbness and disconnection from her environment during times of severe stress." Ex. 14 at 1 (Brand Dec.).

[58] Dr. Brand found that Ms. Lucio meets criteria for the following mental health diagnoses, all consistent with her lifetime of traumatic experiences: Other Specified Dissociative Disorder, Posttraumatic Stress Disorder, Persistent Depressive Disorder, Major Depressive Disorder, Panic Disorder, Obsessive Compulsive Disorder, and Cocaine Use Disorder. *Id.*

Dr. Brand further opined that "Ms. Lucio was clearly disabled by the impact of these serious, untreated psychological disorders throughout most of her life, including at the time of her daughter's death." *Id.*

The new science and the recent psychological testing demonstrate that Ms. Lucio's disabling, complex diagnoses and trauma symptoms were undoubtedly at play in the interrogation room, rendering Ms. Lucio extremely susceptible to the interrogators' psychological manipulation, threats, and re-traumatizing tactics, and that Ms. Lucio was thus at "very high" risk of false confession. Ex. 10 at 15 (Gudjonsson Report). As Dr. Brand explains, as a result of Ms. Lucio's trauma,

> [s]he avoids confrontation and passively complies with what men tell her to do. During the interrogation, Ms. Lucio was confronted by several different men, often two at a time in a very small room. She appeared to be much smaller than the men and was alone, isolated from her family, with angry men yelling at her and calling her names. Just as had occurred throughout her life, they berated her, called her names . . . and threatened her. *She eventually responded as she always did to threatening situations with men: she gave them what they were demanding*.

Id. at 17 (emphasis added). Dr. Brand adds that, "[d]uring the interrogation, Ms. Lucio's trauma-based pattern of trying to please angry men kicked in[,] . . . [and,] [a]s in childhood, she [reportedly] felt vulnerable and trapped[,] [and] . . . believed she had to do what the detectives told

her to do." *Id* at 19.

2. This new science on trauma as a risk factor for false confession was not ascertainable through the exercise of reasonable diligence when Ms. Lucio's previous habeas application was filed

In 2011, the year that Ms. Lucio filed her previous habeas application in this Court, the scientific evidence establishing that trauma places innocent people at risk of false confession was not reasonably ascertainable, as the vast majority of the scientific evidence simply did not exist until after 2011. Indeed, it was not until 2015—four years after Ms. Lucio's prior application—that the "first database of false confessions by women only (many with trauma histories and/or supposed child victims [of trauma]) was compiled and analyzed." Ex. 12 at 3 (Guarnera Dec.). Thereafter, the first available publication "specifically addressing false confessions among women who have experienced domestic violence" was published in 2016. *Id.* Then, in 2017, experts published compelling data that women with domestic abuse histories (like Ms. Lucio), are more "easily subjected to influence from authority figures" (like Ms. Lucio's armed interrogators). *See* Lenore E. A. Walker, *The Battered Women Syndrome* 457–60, 458 (4th ed. 2017). Further, new empirical studies published in 2015 and 2021, several years after Ms. Lucio's last application, reveal

that child sexual abuse and, particularly, abuse at the hands of a family member—as Ms. Lucio endured—likely renders individuals vulnerable to interrogative pressure.[59] And, just last year, the very first scholarly paper was published that "outline[d] a comprehensive theory of the mechanisms that may explain why trauma exposure is associated with false confessions." Ex. 12 at 3 (Guarnera Dec.).

Moreover, it was not until 2012, a year after Ms. Lucio's prior habeas application, that the novel concept of "'interrogation-related regulatory decline' (IRRD)—or decline in the self-regulation abilities necessary to resist the forces of influence inherent to interrogation[,]"—was introduced by experts as a mechanism for better understanding the psychological processes experienced by a subject who falsely confesses, which helped inform future scientific assessments on how trauma further impacts such "regulatory decline." *See* Deborah Davis & Richard A. Leo,

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[59] *See*, *e.g.*, Gisli Gudjonsson et al., *Trauma symptoms of sexual abuse reduce resilience in children to give 'no' answers to misleading questions*, 168 Personality & Individual Differences (2021) (finding that "trauma symptoms, . . . were significantly associated with children's inability to give 'no' answers after negative feedback. The more severe the trauma, the greater the vulnerability."); Monia Vagni et al., *Immediate and delayed suggestibility among suspected child victims of sexual abuse*, Personality & Individual Differences, 79, 129-133 (2015).

Interrogation-Related Regulatory Decline: Ego Depletion, Failures of Self-Regulation, and the Decision to Confess, 18:4 Psychology, Public Policy, & Law 673, 673 (2012); *see also* Ex. 12 at 6 (Guarnera Dec.). The concept of IIRD, "in conjunction with the rapidly expanding science of trauma-related neural deficits, would not have been available to an expert at the time of Ms. Lucio's petition in 2011." Ex. 12 at 6 (Guarnera Dec.).

Although the first empirical studies testing the association between trauma and susceptibility emerged in 2007, "science is a process that requires replication of a new finding before it can be considered trustworthy, particularly when applied in a legal setting." *Id*. at 2 (also explaining that "highly novel or minimally tested scientific theories are likely to be properly excluded from evidence."). Indeed, "[s]ince 2011, scientific research on the link between trauma and false confessions has expanded rapidly[.]" *Id.* Accordingly, the fact that a limited number of initial empirical studies were available before 2011 does not render this new science reasonably "ascertainable" to Ms. Lucio in 2011. Rather, because "the bulk of the extant research on the association between trauma exposure and false confessions was published after 2011, and *all of the research* on the association between domestic violence and false confessions

was published after 2011[,]" *id.* at 8 (emphasis added), the science regarding trauma as a risk factor for false confession was not reasonably ascertainable to Ms. Lucio at the time of her previous application.

3. Today, this scientific evidence demonstrating Ms. Lucio's very high risk of false confession is admissible under Texas law

A false-confession expert's testimony regarding Ms. Lucio's profound vulnerability to false confession in light of her trauma history amounts to scientific evidence based upon "specialized knowledge [that] will help the trier of fact to understand the evidence or to determine a fact in issue[,]" and thus is admissible pursuant to Tex. R. Evid. 702. Indeed, notwithstanding robust scientific evidence showing that certain personal and situational risk factors meaningfully increase the risk of false confession, such a risk is not generally known and appreciated by laypersons. *See* Jeffery Kaplan, et al., *Perceptions of Coercion in Interrogation: Comparing Expert and Lay Opinions*, Psychology, Crime & Law, at 2, 6 (2019); *see also* Fabiana Alceste, et al., *The Psychology of Confessions: A Comparison of Expert and Lay Opinions*, 35 Applied Cognitive Psychology 39 (2021) (finding that an "average layperson's common

knowledge does not correspond to findings provided by the rich, complex, and vast literature about criminal interrogations and confessions").

Today, appellate courts around the country,[60] including this Court, have overturned convictions because expert testimony about the existence and causes of false confessions was erroneously precluded or not proffered. In December 2021, this Court overturned the conviction of a man who was denied effective assistance of counsel because his trial attorney neglected to proffer expert testimony regarding, *inter alia*, the coercive nature of the interrogation technique used to elicit his confession. *See Ex parte Boutwell*, No. WR-90,322-01, 2021 WL 5823379, at *1 (Tex. Crim. App. Dec. 8, 2021) (unpublished). This Court's grant of relief in *Ex parte Boutwell* reflects the Court's understanding of the import and admissibility of false-confession expert testimony, and is consistent with courts around the nation that have likewise acknowledged the necessity for expert testimony to assist the jury in assessing confession evidence.[61]

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[60] *See, e.g.*, *People v. Churaman*, 126 N.Y.S.3d 487 (N.Y. App. Div. 2020); *People v. Burgund*, 66 N.E.3d 553, 587 (Ill. App. Ct. 2016).

[61] *See, e.g.*, *Tigue v. Commonwealth*, 600 S.W.3d 140, 162 (Ky. 2018) ("[W]hen relevant indicia [of a false confession] are present, and the proffered testimony is reliable, a defendant should be allowed to present expert testimony" regarding the phenomena of false confession); *State v. Perea*, 322 P.3d 624, 640 (Utah 2013) ("[E]xpert testimony about factors leading to a false confession assists a

At a trial today, unlike in 2008 or 2011, Ms. Lucio would have a strong argument that her confession is inadmissible in evidence, due to the incomplete nature of the recording, in violation of Tex. Code Crim. Proc. art. 2.32(c), which became state law in 2017.[62] However, to the extent her confession were to be admitted into evidence despite its violation of the recording statute, today, Ms. Lucio would be able to proffer the

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trier of fact to understand the evidence or to determine a fact in issue" (internal quotation marks and citation omitted)); *People v. Kowalski*, 821 N.W.2d 14, 27 (Mich. 2012) ("[E]xpert testimony bearing on the manner in which a confession is obtained and how a defendant's psychological makeup may have affected the defendant's statements is beyond the understanding of the average juror and may be relevant to the reliability and credibility of a confession").

[62] In 2017, the Texas Legislature, in an effort to prevent against false confessions, passed a law requiring that interrogations regarding felony convictions be electronically recorded in their entirety. *See* Tex. Code Crim. Proc. art. 38.22; art. 2.32; *see, e.g.*, Maurice Chammah, *Bill Would Require Police to Record Interrogations*, Texas Tribune (Dec. 5, 2012) (indicating that the bill was proposed to prevent against false confessions and "preserv[e] what happened in an interrogation room and what a suspect actually said"). Under current Texas law, Ms. Lucio's interrogation would be inadmissible in evidence because the recording of the interrogation did not "continue[] until the time the interrogation cease[d]." Tex. Code Crim. Proc. art. 2.32(c)(2). Rather, the video and audio recording is inexplicably turned off for nearly 90 minutes, before Ms. Lucio makes her final, and most incriminating statements, Ex. 10 at 9 (Gudjonsson Report), and thus is inadmissible. *See Flores v. State*, No. PD-1189-15, 2018 WL 2327162, at *1 (Tex. Crim. App. May 23, 2018) (unpublished) (finding that confession evidence was inadmissible because the recordings were "an inaccurate representation of the conversation between the peace officers and appellant due to the absence of over thirty minutes of the interview.").

testimony of a false-confession expert that would include a scientific explanation of a critical aspect of her vulnerability to false confession: the impact of her significant trauma on her response to the interrogation and, correspondingly, her exceptionally high levels of compliance[63] and risk of false confession.

4. Had the jury heard testimony from a false-confession expert, Ms. Lucio likely would not have been convicted

The new scientific evidence, discussed in the attached expert affidavits of Dr. Gudjonsson, David Thompson, Lucy Guarnera, and Dr. Brand, undermines the *primary direct evidence* used to convict Ms. Lucio. The prosecution's reliance on Ms. Lucio's statements—now demonstrated to be an unreliable product of police coercion of a vulnerable trauma survivor—without the presentation of any scientific evidence regarding her

[63] Recent psychological testing of Ms. Lucio reveals that she has "abnormally high" levels of suggestibility, which compounded the impact of the interrogating officers' psychological manipulation during interrogation. Ex. 10 at 15 (Gudjonsson Report) (explaining Ms. Lucio's score on a scientific test used to measure suggestibility); *see also* Ex. 14 at 19 (Brand Dec.). As Dr. Brand explains, this recent psychological testing reveals that Ms. Lucio is "extraordinarily compliant" and thus "likely to cave in to demands from others, even being willing to admit to things that are factually inaccurate[,]" *id.* at 20. In light of the new science discussed below, Ms. Lucio's exceptionally high level of compliance and suggestibility can be understood as a direct result of her history of significant trauma and domestic abuse.

exceptionally high risk for false confession, clearly prejudiced her.

Here, Ms. Lucio can demonstrate that, by a preponderance of the evidence, had a false-confession expert testified regarding her exceptionally high risk of falsely confessing in light of her status as a trauma and domestic abuse survivor, she would not have been convicted at trial. As Dr. Brand opined, "without evidence of Ms. Lucio's complex traumatic history and multiple mental health diagnoses that directly impact her ability to process and respond to information and distressing stimuli, the jury was left without the essential information it needed to understand what it observed in the interrogation videos." Ex. 14 at 16 (Brand Dec.). Indeed, based on a modern understanding of false-confession science, including trauma as a risk factor for false confession, experts agree that Ms. Lucio's admissions, presented to her jury as a confession to murder, are "unreliable[,]" "inadvertent[,]" and amount to a mere "regurgitation" of the words and facts that interrogators fed to her throughout a highly coercive, lengthy interrogation process. Ex. 11 at 22, 25 (Thompson Report); Ex. 10 at 15-16 (Gudjonsson Report).

Without an explanation of the new science regarding Ms. Lucio's high risk of false confession and the corresponding doubts regarding the

reliability of her statements, the jury was undoubtedly prejudiced, as "confessions have more impact on verdicts than do other potent forms of evidence[,]" to such an extent that "people do not adequately discount confessions—even when they are retracted and judged to be the result of coercion." Saul M. Kassin, *Why Confessions Trump Innocence*, 67 *American Psychological Association* 431, 433-34 (2012) (internal citations omitted). Indeed, *twenty-two percent* of innocent people who falsely confessed and were later exonerated by DNA testing had exculpatory DNA evidence available at the time of trial but were nonetheless wrongfully convicted. Innocence Project, *DNA Exonerations in the United States* (accessed Mar. 15, 2022), https://www.innocenceproject.org/dna-exonerations-in-the-united-states/.

An expert would meaningfully counteract the overwhelmingly prejudicial impact of the "confession evidence" by explaining how Ms. Lucio's trauma history rendered her highly susceptible to interrogative pressure, as well as how the interrogating officers' highly coercive interrogation techniques—which rose to the level of "situational" risk factors for false confession—had a powerfully manipulative impact on Ms. Lucio, in light of her unique vulnerabilities.

Specifically, an expert would explain that the interrogating officers' use of high-risk interrogation techniques, such as "maximization" and "minimization"—tactics that are integral to the "Reid technique," which "have been repeatedly present in known cases of false confessions," and are thus considered by scientists to be false confession "risk factors"[64]—had a powerfully manipulative impact on Ms. Lucio in light of her trauma history, as well as her "abnormally high" levels of compliance and suggestibility, persistent depression and below-average IQ.[65]

"Maximization" is a tactic intended to "convey the interrogator's

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[64] Jeffrey Kaplan et al., *Perceptions of coercion in interrogation: comparing expert and lay opinions*, 26 Psych. Crime & Law 384, 388 (2019); *see also* Kassin et al., Police Induced Confessions, at 12.

[65] Studies confirm that "mental disabilities," including "depressive[] … disorders," can "increase vulnerability to police interrogation." Lauren Rogal, *Protecting Persons with Mental Disabilities from Making False Confessions: The Americans with Disabilities Act as a Safeguard*, 47 N.M. L. Rev. 64, 70 (2017); *see also* Kassin et al., *Police Induced Confessions*, at 22. The same goes for intellectual limitations: individuals with such limitations are "over-represented in false confession cases." Kassin, et al., *Police Induced Confessions*, at 20; *see also* Brandon L. Garrett, *Contaminated Confessions Revisited*, 101 Va. L. Rev. 395, 400 (2015) (noting that of all the proven false confessions studied, "one-third involved individuals who were mentally ill or had an intellectual disability"). Indeed, experts on false confessions overwhelmingly agree that "[i]ndividuals who have intellectual disabilities are particularly vulnerable to the pressures of social influence" which are used by officers during police interrogation. Saul M. Kassin et al., *On the General Acceptance of Confessions Research: Opinions of the Scientific Community*, 71:1 American Psychologist 63, 72 (2018).

rock-solid belief that the suspect is guilty and that all denials will fail."[66] This tactic—designed to coerce individuals into confessing—includes expressing certainty in the subject's guilt, implicitly or explicitly threatening harsher consequences if the suspect persists in a claim of innocence, as well as "making an accusation, overriding [the suspect's] objections, and citing evidence, real or manufactured, to shift the suspect's mental state from confident to hopeless."[67] Minimization, on the other hand, is "designed to provide the suspect with moral justification and face-saving excuses for having committed the crime in question."[68] Officers might "offer[] sympathy and understanding[,]" and often provide "a choice of alternative explanations—for example, suggesting to the suspect that the murder was spontaneous, provoked, peer-pressured, or accidental."[69] Both tactics have been shown to elicit unreliable admissions, and both were used extensively throughout Ms. Lucio's interrogation to coerce her into making unreliable, incriminating statements. Ex. 11 at 25 (Thompson Report) ("[t]hese techniques were seen in multiple forms throughout

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[66] Kassin, et al., *Police Induced Confessions*, at 12.

[67] *Id*.

[68] *See id*. at 10.

[69] *Id*. at 27.

[Ms. Lucio's] interrogation[,]" and the interrogation thus had a "high likelihood of [producing] a[n] . . . unreliable confession").

The interrogators likewise employed the maximization technique when they "stood over [Ms. Lucio] and repeatedly shouted at her, . . . us[ing] . . . threats and inducements[,]" throughout the interrogation. Ex. 10 at 16 (Gudjonsson Report). One detective yelled: "[i]f I beat you half to death like that little child was beat, I bet you you'd die too." *Id.* at 27. Another implied that Ms. Lucio would not be permitted to go to Mariah's funeral unless she started confessing. *Id.* at 29. The interrogators told her that by asserting her innocence, she was "digging [her]self deep[er]" into the "hole" she was in. Ex. 10 at 47 (Gudjonsson Report). Without a confession, they told her, she would "look[] like . . . a coldblooded killer[.]" *Id.* at 31. As Dr. Gudjonsson explains, the officers worked to "maximize[] Ms. Lucio's emotional distress," *id.* at 36—perhaps most clearly displayed when Ms. Lucio tells officers that she "wish[es] [she] was dead," *id.*, and later, through tears, again expresses a desire for her own death, *id.* at 49.

As Dr. Gudjonsson explains, the officers repeatedly induced Ms. Lucio to implicate herself, trying to "persuade her that this was merely a mistake due to the frustration [or] due to the stress she was under at the

time, emphasizing that everybody makes mistakes." *Id*. at 8; *see, e.g.*, *id.* at 38 (Texas Ranger Escalon saying "it happens," and "we all make mistakes"). In one particularly manipulative use of the technique, Ranger Escalon got within inches of Ms. Lucio's face, repeatedly insisting he "already kn[ew] what happened," that her confession would "help," that she "owe[d] it" to her deceased daughter and her mother, that God would forgive her, and that confession was the best way to "put this to rest." Ex. 10 at 37 (Gudjonsson Report).

Yet the jury heard no evidence whatsoever about how these interrogation tactics, used primarily by armed men, had the power to manipulate Ms. Lucio into compliance with their demands for a confession and incriminating re-enactment, in light of her significant history of trauma and domestic abuse at the hands of men.

In addition to the maximization and minimization techniques, the officers used a "bluff" technique—another tactic which has been scientifically demonstrated to elicit false confessions from innocent suspects. *See* Jennifer T. Perillo & Saul M. Kassin, *Inside Interrogation: The Lie, The Bluff, and False Confessions*, 35 Law & Hum. Behav. 327, 327 (2011). A "bluff" is a tactic in which interrogators pretend to or imply that they

have "evidence without [] asserting that this evidence necessarily implicates the suspect." *Id.* For example, if officers tell a suspect that blood or other forensic evidence was collected from the scene and will be tested, when such evidence either doesn't exist or will not or cannot be subjected to forensic testing, officers are engaging in the "bluff" technique. *Id.* Using a laboratory paradigm designed to test innocent people's willingness to falsely confess in response to deceptive police tactics, experts have determined that such "bluff" tactics can increase the rates of false confessions by as much as 60%—a rate consistent with that of false confessions in response to more explicitly deceptive tactics, such as the false-evidence ploy.[70] *Id.* at 335.

Here, the officers repeatedly told Ms. Lucio they would conduct forensic testing of her ring to compare it to Mariah's injuries and determine

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[70] The "false evidence ploy" has been used in the majority of known, police-coerced false confession cases. Kassin et al., *Police-Induced Confessions*, at 12. The tactic is distinct from the "bluff" in that it typically involves deception regarding evidence that directly implicates the suspect, for example, fabricating a positive eyewitness identification or inventing inculpatory forensic evidence. *Id.* at 28. After learning of the (false) evidence, a suspect will likely feel "trapped" based on the perceived "inevitability of evidence against them" and, consequently, view compliance with officers' suggestions and admission of guilt as the only option. *Id.* The presentation of false evidence is regarded as a "controversial tactic," especially in light of the outsized role it has played in inducing innocent suspects to falsely confess. *Id.*

if there was a "match." Ex. 11 at 22 (Thompson Report). Officers expressed confidence that Ms. Lucio's rings would in fact "match" to Mariah's injuries, at one point asserting: "I bet you we can match that [Ms. Lucio's rings] for that [Mariah's injuries]. I bet you it's there." *Id.* Trial testimony confirmed that such testing was never actually conducted. 33 RR 35 (Detective Cruz confirming that the ring was never tested). While perhaps "not explicitly deceitful[,]" the officers' remarks "suggesting that the ring will be a direct match to the markings on Mariah's body" amount to "bluffs" or "implicit suggestions of evidence" which, in turn, likely further incentivized Ms. Lucio to falsely confess. Ex. 11 at 10 (Thompson Report). As Thompson explains, "when an innocent person is told that potential evidence exists[,]" such as the ability to conclusively match ring marks with injuries on a victim, "they have confidence that the proposed evidence will prove their innocence[,] [and] [t]herefore, an innocent person may be incentivized to provide a confession with the goal of escaping the pressure of an interrogation, erroneously believing the investigation will eventually prove their innocence." *Id.* In other words, the tactic may be perceived "not as a threat of inculpation but rather as a promise of future exoneration which, paradoxically, ma[k]e[s] it easier to confess."

Perillo & Kassin, *Inside Interrogation*, at 335.

The "paradoxical effect" that the suggestion of forensic testing would have upon an innocent person, is a particularly counterintuitive concept, that undoubtedly was missed by the jury that convicted Ms. Lucio. *Id.* (noting the problem of using such techniques, particularly because "of other research showing that police and lay jurors cannot easily distinguish between true and false confessions" and predicting that "bluff-induced false confession are particularly likely to be misperceived to be voluntary and as true because of the apparently benign nature of the deception involved"). Moreover, despite expanding public knowledge that people can and do falsely confess under certain circumstances, jurors "overall . . . have appeared unable to make the connection that psychologically coercive interrogation tactics can enhance the likelihood that an elicited confession is false." Amelia Mindthoff et al., *A Survey of Potential Jurors' Perceptions of Interrogations and Confessions*, 24:4 Psychology, Public Policy, & Law 430, 432 (2018). Thus, expert testimony on these issues to aid a jury's assessment of confession evidence would have had an impact on the jury.

Furthermore, as the new science regarding Ms. Lucio's vulnerability due to her trauma history reveals, Ms. Lucio was highly susceptible to the officers' efforts to shape her words and narrative to conform to their theory of guilt. With an expert's testimony, the jury would have detected what two experts have determined to be true—that, due to the officers' tactics and Ms. Lucio's vulnerability, her incriminating statements are not a reliable "confession" of her guilt, but rather are "a *regurgitation* of information relayed to her from investigators throughout the interrogation." Ex. 11 at 4, 22 (Thompson Report) (emphasis added).

Now known as the "phenomenon of confession contamination[,]" comprehensive studies of known false confessions have revealed that police officers, intentionally or unintentionally, often "prompt the suspect" on how they believed the crime happened, thereby allowing an innocent suspect without any knowledge of the crime to "parrot back an accurate-sounding narrative."[71] "Contamination"—a suspect's adoption of facts or narratives suggested to them by police—is found in the vast majority of

[71] Brandon L. Garrett, *The Substance of False Confessions*, 62 Stan. L. Rev. 1051, 1053 (2010).

false confessions. *See id*. at 1080-1082 (detailing instances in which suggestion by police was apparent in recordings of several analyzed false confessions). As a result of contamination, studies show that proven false confessions often contain detailed narratives and alleged motivations that were suggested to the innocent confessor by the interrogating officers.[72] In such cases, the alleged wrongdoer isn't "confessing" to anything at all, but rather repeating the story the interrogator has suggested is the "right" one. And that is precisely what happened here.

Specifically, officers "contaminated" the interrogation by repeatedly showing Ms. Lucio photographs of the specific injuries they insisted were evidence of abuse, expressing absolute certainty as to Mariah's cause of death by abuse, and feeding facts to Ms. Lucio about the purported crime and her alleged motivation. When Ms. Lucio ultimately acquiesced to the officers' insistence in her guilt, she merely adopted the very words fed to her by the interrogating officers. Consistent with her exceptionally high

[72] *See* Sara C. Appleby et al., *Police-induced confessions: an empirical analysis of their content and impact*, 19:2 Psychology, Crime, & Law 111, 125 (2013); *see also* Richard A. Leo et al., *Promoting Accuracy in the Use of Confession Evidence: An Argument for Pretrial Reliability Assessments to Prevent Wrongful Convictions*, 85 Temple L. Rev. 759, 776 (2013).

levels of suggestibility, Ms. Lucio's only explanation or motive for the alleged abuse was exactly what officers had suggested to her over and over again—that she was a "frustrated" mom under pressure. Ex. 10 at 30-37 (Gudjonsson Report). When asked to elaborate, she again repeated the interrogating officers' own words, saying that her "other children, they were very hyper and it was hard for me take care of all of 'em." *Id.* at 41. That is precisely the explanation that police suggested to her throughout the interrogation; when using minimization tactics, officers insisted that the alleged abuse was understandable because she had "a lot of children to put up with[,] . . . [was a] stressed mom, . . . [who had three boys who were] very hyper." Ex. 10 at 55 (Gudjonsson Report).[73] Officers further contaminated her statements by "lead[ing] [Ms. Lucio] to change her words" until "her responses [were] to their satisfaction[.]" Ex. 11 at 4

[73] Similar coercion occurred when officers suggested to Ms. Lucio that she had bitten Mariah. As discussed in Section I.A1 and II.A, any purportedly scientific conclusion that Mariah had bite marks on her body is wholly unreliable. But even setting that aside, Ms. Lucio's "confession" to having bitten Mariah bears indicia of unreliability already discussed. The officers forced Ms. Lucio to act it out on a doll, having previously coached her on how to do so. *See supra* p. 10 & fn. 49. After saying "[l]et's start with the bite mark," the officer told Ms. Lucio to "just re-enact what … how you did it," and when Ms. Lucio said "[d]o I have to?," the officer told her "[y]es." Certified Int. Tr. at 168-69; Ex. 10 at 47 (Gudjonsson Report). And again, when officers asked Ms. Lucio why she bit Mariah, she parroted their own language back to them, saying it must have been "[f]rustration, I guess." Ex. 10 at 40 (Gudjonsson Report).

(Thompson Report). Specifically, over the course of the five-hour interrogation, officers induced [Ms. Lucio] to alter her words from "'discipline' to 'spank' to, ultimately, a role play of her 'beating' a doll in the interrogation room." *Id.*

Without expert testimony regarding the new science on trauma and how susceptible Ms. Lucio was to the interrogating officers' contamination and gradual shaping of the narrative, the jury was likely convinced that Ms. Lucio's on-camera admissions were a truthful account of her behavior and motive. In reality, the new science reveals that Ms. Lucio's admissions were a mere repetition of the officers' incriminating words, and, in light of the coercive tactics with which she was confronted , were an understandable result of her trauma and correspondingly high levels of suggestibility and compliance.

In light of the myriad risk factors for false confessions and indications that Ms. Lucio's inculpatory statements were a result of her suggestibility and vulnerability due to her history of trauma, not her guilt, experts have opined that her "inadvertent" admissions were "not [] credible," Ex. 10 at 15 (Gudjonsson Report), and are properly understood as

"contaminated … through a coercive process with a high likelihood of being a coerced-compliant and unreliable confession[,]" Ex. 11 at 25 (Thompson Report). The jury that convicted Ms. Lucio had no such science available when it found her guilty of capital murder.

As discussed above, the State's case rested almost entirely on Ms. Lucio's reluctant, "inadvertent" admissions. The forensic evidence used at trial—that purported to show that Mariah's death was caused by conduct Ms. Lucio took responsibility for during her custodial interrogation—was false and unscientific. Because it is now known that the State's evidence purporting to show that Mariah's death had been the result of abuse is false, testimony from an expert explaining Ms. Lucio's exceptionally high risk of false confession—the only other evidence against her—would have likely resulted in a different trial outcome.

D. New Scientific Evidence Demonstrates The Unreliability And Falsity Of Demeanor Reading

1. The current scientific understanding of demeanor and emotion "reading" was unavailable at the time of trial

The neuroscientific consensus that now exists debunking "emotion reading" was not available at the time of Ms. Lucio's 2008 trial. While at the time a growing number of individual studies had begun to reveal the

impossibility of diagnosing emotions solely from facial movements, body movements or non-verbal vocalizations, it was not until very recently that consensus was reached establishing there is no scientific basis for such conclusions." Ex. 9 at 2 (Barrett Dec.). This neuroscientific consensus was established by a study initiated in 2016 of more than 1,000 peer-reviewed published scientific articles on whether it is possible to infer a person's emotional state. The study resulted in a 2019 peer-reviewed consensus paper that established based on the prevailing scientific study and literature in the field there is no scientific basis for the notion that a particular facial, body movement or non-verbal vocalization can be "read" to reveal an underlying emotional state. *Id.* at 3. Rather, the 2019 consensus paper, *Emotional expressions reconsidered: Challenges to inferring emotion in human facial movements*, established the prevailing scientific understanding that configurations of facial movements do not have inherent emotional meaning, nor do they signal particular emotional states in a manner that is independent of person, context and culture. It is accordingly not possible through personal observation to detect, nor to accurately infer, an instance of emotion from a person's facial or body movements.

2. The new scientific evidence regarding the invalidity of demeanor reading would be admissible under the Texas Rules of Evidence at a trial held on the date of the application

The new neuroscientific evidence regarding demeanor and emotion is admissible in Texas courts. *See* Tex. R. Evid. 702 (permitting the testimony of a witness "who is qualified as an expert by knowledge, skill, experience, training, or education [to] testify in the form of an opinion or otherwise if the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue").

3. Had the scientific evidence regarding the falsity of Escalon's demeanor reading been presented at trial, on the preponderance of the evidence Ms. Lucio would not have been convicted

Ms. Lucio would not have been convicted if the new neuroscientific evidence establishing the falsity of Ranger Escalon's demeanor reading testimony was presented at trial, and she is therefore entitled to relief. Tex. Code Crim. Proc. art. 11.073 § (b)(2). There can be no question that Ranger Escalon's testimony had a profound impact on the jury's verdict, which served as independent evidence of her guilt, and added credibility to the State's "confession" and medical evidence. Ranger Escalon testi-

fied about his extensive experience in law enforcement, investigating major cases and interviewing suspects. While he was not qualified as an expert, he inappropriately was permitted to provide expert opinion testimony, and egregiously testified *to the ultimate issue in the case*: that Ms. Lucio was guilty. He testified that his determination of Ms. Lucio's guilt was absolute, based on her demeanor—her lack of eye contact and slumped shoulders—that these were certain, "black and white" indications, the same as a verbal admission that she "did it." This testimony was not only completely baseless and scientifically invalid, proven in the years after trial by consensus in the neuroscientific community, but even putting other evidence aside, it is sufficiently inculpatory persuasive to have brought about a guilty verdict.

III. CLAIM 3: THE SCIENTIFICALLY VALID EVIDENCE SHOWS THERE WAS NO MURDER AND MS. LUCIO IS ACTUALLY INNOCENT; EXECUTING MS. LUCIO WOULD VIOLATE THE FEDERAL CONSTITUTION

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

Attached to the instant application are new reports, including from nationally recognized medical professionals, a pathologist, a police

trainer, clinical psychologist, and neuroscientist that, collectively, disprove *every element* of the prosecution's case against Ms. Lucio. *See supra* n.16. Indeed, various medical experts have reviewed the available evidence and affirm that the State relied on false and misleading evidence at trial in the guise of medical opinion, and that—in direct contravention to what the jury heard—Mariah's injuries can be attributed to complications after her fall "that have nothing to do with intentional force."[74] Further, two prominent experts on false confessions have concluded that Ms. Lucio's custodial statements—presented to the jury as a "confession" to murder—were actually the product of coercion, have all the hallmarks of a false confession, and amount primarily to a mere "regurgitation" of officer-fed facts.[75]

The extensive evidence attached hereto reveals how Ms. Lucio's wrongful conviction took shape: Ms. Lucio's trauma response to her daughter's death, wrongfully perceived by responding officers and her interrogators as evidence of guilt, set in motion a profoundly biased inves-

[74] Ex. 4 at 6 (Ophoven Dec).

[75] Ex. 10 (Gudjonsson Report); Ex. 11 at (Thompson Report).

tigation and, from there, error compounded error. The biased investigation supported a prosecution—led by a criminally corrupt prosecutor—centered on an unreliable, contaminated "confession" and false scientific evidence that misled and inflamed the jury. Viewing all of the available evidence, as discussed *supra* and incorporated herein, no rational juror would have found Ms. Lucio guilty beyond a reasonable doubt.

A. Executing An Actually Innocent Person Violates The Eighth And Fourteenth Amendments

The new evidence presented here demonstrates that Ms. Lucio is actually innocent of capital murder. *See Ex parte Elizondo*, 947 S.W.2d 202, 205 (Tex. Crim. App. 1996). Under *Elizondo*, the applicant is required to show by clear and convincing evidence that no reasonable juror would have convicted him in light of new evidence of innocence. This Court has also ensured that procedural barriers do not prevent courts from considering claims of actual innocence. *See Ex parte Tuley*, 109 S.W.3d 388, 390-91 (Tex. Crim. App. 2002) (holding applicant may assert an actual innocence claim regardless of the plea entered or whether a judge or jury heard the case).

By executing an innocent person, Texas would violate the Eighth Amendment's bar on cruel and unusual punishment, as incorporated by

the Fourteenth Amendment, by imposing a punishment that fails to serve any "legitimate penological goal." *Graham v. Florida*, 560 U.S. 48, 67 (2010). Additionally, executing an innocent person would violate the person's Fourteenth Amendment substantive due process right, as the execution of an innocent citizen would "shock[] the conscience." *Rochin v. California*, 342 U.S. 165, 172 (1952). Further, refusing additional process to an applicant with persuasive new evidence of innocence would violate Fourteenth Amendment procedural due process because a person retains a constitutional interest in her own life even after she has been sentenced to death; thus any process by which that life is taken must accord with the dictates of procedural due process. Indeed, those sentenced to death must be continuously afforded heightened reliability and a "high regard for truth" in their proceedings. *See, e.g.*, *Ford v. Wainright*, 477 U.S. 399, 411 (1986).

Stated simply, *Elizondo* recognizes that executing someone who is innocent is "constitutionally intolerable," *Herrera v. Collins*, 506 U.S. 390, 419 (1993) (O'Connor, J., concurring), and thus must not be permitted by any court in this country, regardless of any procedural barriers to habeas relief.

B. In Light Of The New Evidence Detailed Above, No Rational Juror Could Find Ms. Lucio Guilty Beyond A Reasonable Doubt

No rational juror could find Ms. Lucio guilty beyond a reasonable doubt in light of the newly available scientific evidence that supports her innocence, the discussion of which is incorporated by reference. *See supra* Claim 2.

Specifically, no reasonable juror would have convicted Ms. Lucio of capital murder without the State's unconstitutional presentation of: (1) Dr. Farley's false testimony that physical abuse was the *only* explanation for Mariah's death, that Mariah had adult-sized bitemarks on her body, and that the abuse that purportedly caused Mariah's death had to have occurred within twenty-four hours of her death, making impossible Ms. Lucio's defense that Mariah declined after an accidental fall two days earlier; or (2) false testimony by Ranger Escalon that he "knew" Ms. Lucio was guilty based on her demeanor and body language—testimony that entirely contradicts current neuroscientific consensus. Additional scientific evidence that the jury never heard, which further casts significant doubt on Ms. Lucio's guilt, and would render any vote for conviction irra-

tional, includes: (1) evidence that Mariah's injuries were entirely consistent with head trauma incurred by an accidental fall two days before her death; (2) new science regarding Ms. Lucio's exceptionally high risk of falsely confessing during the relentlessly coercive, nighttime interrogation, due to her history of significant trauma and domestic abuse, rendering her custodial admissions unreliable; (3) new science revealing how Dr. Farley's knowledge of Ms. Lucio's "confession" corrupted her autopsy findings; and (4) new scientific evidence that Ranger Escalon's testimony that he could discern Ms. Lucio's "guilt" by her demeanor and reactions is false as a matter of now scientific consensus.

In light of all of this available evidence, no reasonable juror would have a basis to conclude beyond a reasonable doubt that the State had proven a homicide beyond a reasonable doubt, much less that Ms. Lucio committed that homicide. Rather, reasonable jurors would have rejected the cause-of-death testimony offered by Dr. Farley, and have significant doubts about the veracity of Ms. Lucio's confession. If presented with all of the available evidence, no rational juror would have been persuaded by the State's implausible theory of the case—that a never-before-violent woman, suddenly took out homicidal "frustration" on her youngest child.

To the contrary, with all of the evidence discussed in and supporting this application, the case for acquitting Ms. Lucio is extremely strong.

For all of the reasons set forth above, Ms. Lucio has demonstrated by a preponderance of the evidence that, but for the various constitutional violations outlined in claims I, IV, and V, and in consideration of the new scientific evidence detailed in Claim II, no rational juror could have found her guilty beyond a reasonable doubt. Accordingly, she is entitled to relief. Tex. Code Crim. Proc. art. 11.071, § 5(a)(2); *Schlup v. Delo*, 513 U.S. 298, 327 (1995).

IV. CLAIM 4: MS. LUCIO'S TRIAL COUNSEL PROVIDED CONSTITUTIONALLY INEFFECTIVE ASSISTANCE

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

Ms. Lucio's trial attorney provided constitutionally deficient assistance of counsel in failing to rebut the false medical testimony of the State's forensic pathologist that the injuries on Mariah's body could only have come from abuse. This testimony was false, undermined Ms. Lucio's defense that her daughter died after an accidental fall (as opposed to abuse), and went unchallenged by defense counsel.

Ms. Lucio hereby incorporates all of the facts and arguments regarding Ms. Lucio's deprivation of her sixth amendment right to counsel contained within her motion for stay of execution on suggestion for the Court to reconsider on its own initiative, filed on Friday, April 8, 2022.

For all of the reasons stated herein, trial counsel's failure to hire a pathologist or other appropriate expert to address Mariah's bruises and bodily injuries constituted ineffective assistance of counsel, as trial counsel's representation "fell below an objective standard of reasonableness" and "there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." *Strickland v. Washington*, 466 U.S. 668, 688, 694 (1984).

In addition, trial counsel's failure to object to the admission of the improper and false testimony by Ranger Escalon regarding his ability to "read" Ms. Lucio's demeanor and determine her guilt—testimony regarding the ultimate question that was within the exclusive province of the jury—likewise amounts to constitutionally deficient assistance of counsel and, for the reasons explained *supra* Claim 1, prejudiced Ms. Lucio. *See id.*

V. CLAIM 5: THE STATE VIOLATED MS. LUCIO'S RIGHT TO DUE PROCESS WHEN IT SUPPRESSED EVIDENCE FAVORABLE TO HER DEFENSE THAT WAS MATERIAL TO BOTH LIABILITY AND SENTENCING

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

A. Introduction

Prosecutors violated their affirmative duty to learn about evidence favorable to Ms. Lucio from others working with them on the case including police and personnel from CPS. Prosecutors suppressed information favorable to Ms. Lucio. Viewed cumulatively, the suppressed evidence undermines confidence in the reliability of Ms. Lucio's conviction and sentence. That is, the judgment against Ms. Lucio was obtained in violation of the Due Process Clause of the Fourteenth Amendment and must be vacated.

Within minutes of Mariah's death, police, without any basis in demonstrable fact or science, decided Ms. Lucio murdered her. Rather than investigate with open minds, police, prosecutors, and medical "experts" set out to prove their conclusions. Every step of their process was tainted

by that prejudgment, cognitive bias, and intentional misconduct, all focused on ensuring only one possible outcome: convicting Ms. Lucio of capital murder. The District Attorney who decided to charge Ms. Lucio with capital murder and seek the death penalty was Armando Villalobos. He is currently serving a 13-year sentence for corruption, taking bribes and fixing cases, at the same time he was prosecuting Ms. Lucio.

Villalobos's team of prosecutors used a variety of methods to ensure that evidence favorable to Ms. Lucio would not be available for her defense at trial. Police excluded evidence corroborating Ms. Lucio's account of Mariah's death—her denial of abuse, Mariah's fall down stairs, her emotional reaction to Mariah's death—from documents that would or could be disclosed to the defense. While working with CPS, prosecutors professed an inability to work with them and delayed production of CPS records to which they had ready access. Then Villalobos's team produced selected documents that omitted evidence favorable to Ms. Lucio's defense. They also misled defense counsel and the court by purporting to disclose all CPS records related to Ms. Lucio in two boxes that were delivered to defense counsel on August 29, 2007, then sponsoring the testimony of a CPS records custodian about disclosures on June 25, 2008,

while maintaining additional exculpatory evidence from CPS in an "open file" at the District Attorney's office. The deceptive tactics continued through the penalty phase, when a member of Villalobos's team misrepresented that the District Attorney had no access to information gathered by therapist Beto Juarez even though an attorney from Villalobos's office spoke with Mr. Juarez during a meeting about his sessions with Ms. Lucio.

This claim is reviewable under § 5(a)(1) of Article 11.071 because the State's deception continued through January 2011, when Ms. Lucio's initial habeas application was due. The material exculpatory evidence presented here was not "ascertainable through the exercise of reasonable diligence on or before that date." *See* Tex. Code Crim. Proc. art. 11.071, § 5(e). The State continued to represent that it had no investigative relationship with CPS, and had not suppressed any evidence. *See* State's Ans. Initial Appl., 2 Suppl. WCR 14-18, 98-102.

The suppressed evidence shows that police and prosecutors were aware from the very beginning that:

- Eyewitnesses said Ms. Lucio had not abused Mariah or any of her children;
- Everyone in the family was aware Mariah fell down the stairs;

- No one in the family described the horrific abuse the prosecution claimed Mariah suffered;

- Mariah's older siblings saw her health decline over the two days between her fall and her death;

- Mariah's dehydrated state was not Ms. Lucio's fault because she tried to get Mariah to drink water;

- Mariah had not shown signs of injury to her arm in the weeks before her death;

- Ms. Lucio had not been unemotional about Mariah's death;

- A witness who claimed she saw bruises on Mariah much earlier would have been impeached by her husband who did not see them, and by her own sworn statement making outlandish claims, and by a CPS investigation that failed to corroborate her account;

- A prosecutor debriefed therapist Beto Juarez about his interviews with Ms. Lucio.

Taken together, the suppressed evidence shows a process so corrupted by prejudgment, cognitive bias, and deception that it could not fairly be called an investigation into the cause of Mariah's death at all, and that produced an entirely unreliable result. The suppressed evidence about Mariah's condition in the days before her death supports medical experts' findings that her bruising originated from DIC, not abuse.

B. Governing Legal Standards

The suppression of favorable and material evidence violates the Due Process Clause of the Fourteenth Amendment. *See Brady v. Maryland*, 373 U.S. 83 (1963); *Banks v. Dretke*, 540 U.S. 668, 691 (2004) ("*Brady* … held that 'the suppression by the prosecution of evidence favorable to an accused upon request violates due process where the evidence is material either to guilt or to punishment, irrespective of the good faith or bad faith of the prosecution.'") (quoting *Brady*, 373 U.S. at 87).

There are three elements to a *Brady* claim: "'The evidence at issue must be favorable to the accused, either because it is exculpatory, or because it is impeaching; that evidence must have been suppressed by the State, either willfully or inadvertently; and prejudice must have ensued.'" *Banks*, 540 U.S. at 691 (quoting *Strickler v. Greene*, 527 U.S. 263, 281-82 (1999)); *Harm v. State*, 183 S.W.3d 403, 406 (Tex. Crim. App. 2006) (en banc) ("(1) the state suppressed evidence; (2) the suppressed evidence is favorable to defendant; and (3) the suppressed evidence is material.").

The applicant has the burden of establishing each element of a *Brady* claim. *Harm*, 183 S.W.3d at 406.

Both the questions of whether the evidence is favorable to the accused and whether it is material (which is synonymous with prejudicial) are determined based on what effective defense counsel could have done with the evidence. *See Kyles v. Whitley*, 514 U.S. 419, 441 (1995) (holding suppressed evidence was material because "disclosure … to competent counsel would have made a different result reasonably probable."); *United States v. Bagley*, 473 U.S. 667, 676 (1985) (*Brady* "evidence is 'evidence favorable to an accused,' … so that, if disclosed and used effectively, it may make the difference between conviction and acquittal") (quoting *Brady*, 373 U.S. at 87). Favorable evidence is evidence which is exculpatory, mitigating or impeaching toward any aspect of the State's case. *Smith v. Cain*, 565 U.S. 73, 75 (2012); *Brady*, 373 U.S. at 87; *Thomas v. State*, 841 S.W.2d 399, 404 (Tex. Crim. App. 1992).

Materiality "turns on the cumulative effect of all … evidence suppressed by the government." *Kyles*, 514 U.S. at 421; *id.* at 436 ("materiality … of suppressed evidence considered collectively, not item by item"). The standard is satisfied when the cumulative effect of the suppressed evidence "raises a reasonable probability that its disclosure would have produced a different result." *Id.* at 421-22. To satisfy the materiality

standard, the applicant "need not show that he more likely than not would have been acquitted had the new evidence been admitted." *Wearry v. Cain*, 577 U.S. 385, 392 (2016) (internal quotation marks and citation omitted). Conversely, the applicant "can prevail even if … the undisclosed information may not have affected the jury's verdict." *Id.* at 392 n.6. Even if the jury, fully aware of all the withheld evidence, "*could* have voted to convict [Applicant]," a new trial is required when a reviewing court lacks "confidence that it *would* have done so." *Id.* at 394 (citing *Smith*, 565 U.S. at 76) (emphasis in original).

Finally, "materiality … is not a sufficiency of evidence test. A defendant need not demonstrate that after discounting the inculpatory evidence in light of the undisclosed evidence, there would not have been enough left to convict." *Kyles*, 514 U.S. at 434-35.

The foregoing standards apply to both the guilt/innocence phase of trial, and the punishment phase. *Brady*, 373 U.S. at 87. In *Brady* itself the "sole claim of prejudice [went] to the punishment imposed," *id.* at 88, which was death.

C. The Suppression Of Evidence Favorable To Ms. Lucio's Defense

Suppression occurs as a matter of law if the prosecution fails to disclose information "either willfully or inadvertently." *Strickler*, 527 U.S. at 282. Because willfulness is not an element of a *Brady* claim, the prosecutor's mindset may be irrelevant. But in this case, the prosecution's actions show a pattern of conduct that is relevant both to whether evidence was suppressed and to whether Ms. Lucio's claim is reviewable under Section 5(a)(1) of Article 11.071.

1. Police omitted favorable evidence from materials that could be or would be disclosed to the defense

Evidence that "raise[s] opportunities to attack … the thoroughness and even the good faith of the investigation" is evidence favorable to the defense that must be disclosed. *Kyles*, 514 U.S. at 445. Of particular importance to this case, suppressed evidence also can be material in part where it could be used to attack "the reliability of the investigation in failing even to consider" another cause of death. *Id*. at 446.

The prosecution failed to turn over information from CPS investigator Florence "Lucy" Arreola. Ex. 20 at 90 (Arreloa Report). Villalobos's team produced to defense counsel a document that purported to represent Investigator Arreola's work on the case. Ex. 21 (Intake Information). It

did not. That document was only an account of what the person who reported Mariah's death said to CPS. *See* Ex. 19 at ¶ 9 (Arreola Dec.).[76] The document that was produced to the defense critically omitted exculpatory information about Investigator Arreola's interactions with Ms. Lucio's children on the night Mariah died.

The suppressed document shows Investigator Arreola interviewed Selina Lucio and Alexandra Lucio, two of Ms. Lucio's older daughters who lived in the home with Mariah and helped care for the baby, and Mariah's brothers Rene, Richard, and Bobby Alvarez. Those interviews were not disclosed to the defense although law enforcement was certainly aware of them because they took place in the Harlingen police station. Investigator Arreola's report indicates she interviewed the children between her initial conversation with Detective Cruz (while Ms. Lucio was in custody and being interrogated) and a second interaction when Detective Cruz presented Ms. Lucio with a CPS form allowing Selina and Alexandra to leave the police station with their older sister Daniella. *See* Ex. 20 at 90-91 (Arreola Report).

[76] Investigator Arreola's suppressed report must be compared with a document that was likely produced to the defense in 2007. Ex. 21 (Intake Information).

Selina told Investigator Arreola that she did not see "any bruises on Mariah except for the ones on her face." *Id*. at 90. Selina also told Investigator Arreola that Ms. Lucio "wouldn't hit" her children. Ex. 20 at 90 (Arreola Report). She also corroborated Ms. Lucio's account that Mariah had fallen down the stairs at the family's previous apartment. *Id*.

Investigator Arreola's suppressed report shows Alexandra's description of Mariah's condition in the days prior to her death corroborated the defense theory that Mariah's health declined after her fall down stairs. Alexandra told Investigator Arreola that "Mariah had been throwing up" and Ms. Lucio "thought it was because she ate a bad tamale." Then Mariah stopped eating. *Id*. Alexandra described how the family "noticed Mariah having difficulty breathing" on Friday night, the night before she died. *Id*. At trial, the prosecution relied on Mariah's dehydrated state to persuade the jury she was abused. 33 RR 134; 34 RR 31; 37 RR 161. But Alexandra's suppressed statement to Investigator Arreola describes Ms. Lucio repeatedly trying to get Mariah to drink something during the two days between her fall and her death. Ex. 20 at 91 (Arreola Report).

Alexandra said she saw bruises on Mariah's eye "from when she fell at the previous apartment," and saw "other bruises on Mariah's back." *Id*. at 91. Alexandra said she "didn't believe that her mother would hit Mariah" and when she spanked the other children, she struck them "on their butt with her hand." *Id*.

Alexandra's statement to Investigator Arreola was consistent with her statement to Harlingen police, *which also was suppressed*. In a sworn statement taken the night Mariah died, Alexandra told police that the night before, her mother and stepfather "had been up all night with the baby" because she "had been breathing heavily" since the previous day. Ex. 22 at 1 (Alexandra Lucio Statement). Alexandra attributed Mariah's condition to illness, not abuse. *Id*. (stating she thought Mariah "might have got sick yesterday when she went outside with my mom.").

Harlingen police also interviewed Alexandra's older sister Daniella Lucio the night Mariah died. Daniella reported that she discovered Mariah not breathing, summoned her stepfather, and called 9-1-1. Her suppressed statement included the observation that Mariah "looked really healthy and active" two weeks before she died. Ex. 24 at 1 (Daniella Lucio Statement). That account is inconsistent with Dr. Farley's claim that

Mariah was suffering from a painful broken arm in the weeks before her death. 34 RR 29-30. Daniella also has given a declaration identifying other information police omitted from her sworn statement. She avers that she told a male police officer that her mother had told her Mariah had fallen down the stairs, that her mother had never been abusive to her or any of her siblings, that she never saw her mother abuse Mariah, and that her sister Alexandra, who was fifteen at the time, was rough with Mariah. Ex. 26 at ¶ 4 (June 13, 2018 Daniella Lucio Dec.).

Instead of disclosing Daniella and Alexandra's sworn statements from the night of Mariah's death, prosecutors provided Ms. Lucio's defense counsel summaries of their statements that omitted the information described here. *See* Ex. 23 (Alexandra Lucio Statement Summary); Ex. 25 (Daniella Lucio Statement Summary).

Additionally, the police produced no report of their interview with June Thompson's "husband," Jose Guerrero, who told police many things that were inconsistent with and completely undermined Ms. Thompson's statement and testimony. For example, Mr. Guerrero did not see any bruises on Mariah when he and Ms. Thompson babysat for her. Ex. 35 at ¶ 8 (Guerrero Dec.). He never had concerns that Ms. Lucio's children

were being hit. He heard yelling from their apartment, but no "sound like they were being hurt." *Id*. While Ms. Thompson had made the outlandish claim that she could hear a child being beaten with a belt in Ms. Lucio's apartment, 37 RR 135-36, 141, Mr. Guerrero told investigators "[i]t would not have been possible to hear" such a thing from next door. Ex. 25 at ¶ 12 (Guerrero Dec.).

2. The police and prosecution used strategic misdirection to suppress exculpatory evidence, including an eyewitness to Mariah's fall

Villalobos's team used the representations in the offense report about Alexandra and Daniella, Ex. 23 (Alexandra Lucio Statement Summary); Ex. 25 (Daniella Lucio Statement Summary), and the representations about Investigator Arreola in the CPS records, Ex. 21 (Intake Information), to persuade defense counsel that they discharged their constitutional duty under *Brady*. The ruse became apparent during the trial.

Ms. Lucio's defense counsel learned that the prosecution had videotapes of interviews with Ms. Lucio's younger sons, Rene, Richard, and Robert that were not included in the CPS files that the prosecution produced to the defense, claiming at the time that those produced files included everything the State had. 33 RR 104-106. The prosecution

claimed it did not suppress the videotapes because they were in the District Attorney's "open records file" at his office. 33 RR 104-05. The trial court ruled Ms. Lucio's attorney should not have accepted the District Attorney's misrepresentation at face value and counseled the defense attorney "you either have to … subpoena them, do a motion to hold them in contempt, or something." 33 RR 105.

That was a misstatement of the law. Fifteen years earlier, the Supreme Court had held the prosecution had an "affirmative duty to disclose evidence favorable to the defense." *Kyles*, 514 U.S. at 432. Almost a decade before Ms. Lucio's trial, the Supreme Court had held that defense attorneys need not file motions or seek subpoenas or contempt citations because "defense counsel may reasonably rely on" whatever representations a prosecutor makes about a file that "contain[s] all materials the State is constitutionally obligated to disclose under *Brady*." *Strickler*, 527 U.S. at 283 & n.23. In *Strickler* the Commonwealth's representations regarding an open file policy were evidence of suppression, not disclosure. *Id*. at 283-84. Finally, in another Texas case decided before Ms. Lucio's trial, the Supreme Court directly contradicted the trial court when it wrote, "Our decisions lend no support to the notion that defendants must

scavenge for hints of undisclosed *Brady* material when the prosecution represents that all such material has been disclosed." *Banks*, 540 U.S. at 695.

Even after the Supreme Court declared that "'prosecutor may hide, defendant must seek,' is not tenable in a system constitutionally bound to accord defendants due process," *Banks*, 540 U.S. at 696, the State again asserted during Ms. Lucio's initial state habeas proceedings that it could not have suppressed evidence by misdirecting defense counsel to produced files when the complete file was back at the District Attorney's Office. 2 Supp. WCR 99-101. Again, though, the court agreed with the State.

The State's use of this sleight of hand in the prior record of this case sheds light on how it suppressed additional evidence Ms. Lucio's counsel discovered more recently.

Those strategic maneuvers concealed—and continue to conceal—exculpatory evidence from Ms. Lucio. Investigator Arreola's reports, which were never disclosed to the defense, indicate that she and her colleague were working jointly with law enforcement. Ex. 20 at 89, 90, 94 (Arreola Report). Investigator Arreola also states in her declaration that

her colleague, Special Investigator Ledesma, was the CPS liaison to law enforcement, and that he routinely shared information from their investigations with law enforcement. Ex. 19 at ¶ 17 (Arreola Dec.).

The suppressed report also states that Investigator Arreola recorded her interviews with Ms. Lucio's children. Ex. 20 at 89 (Arreola Report). Those recordings have not been disclosed to Ms. Lucio to this day. Ex. 39 (Weber Dec.). The reports themselves are heavily redacted even though all of the children mentioned in them are now adults. Ex. 19 at ¶ 10 (Arreola Dec.).

The unredacted portions of Investigator Arreola's suppressed reports contain abundant evidence that was obviously favorable to the defense. On a still undisclosed date, Investigator Arreola interviewed Robert "Bobby" Alvarez, who was seven at the time of Mariah's death. "Robert stated that he has never seen anyone hit Mariah" and critically, he described "an incident where she fell down some stairs." Ex. 20 at 92 (Arreola Report).

Investigator Arreola also interviewed Rene Alvarez who was 9 when Mariah died. "Rene was … asked if he ever saw anyone hit Mariah and he stated no." Ex. 20 at 92 (Arreola Report).

On a still undisclosed date, Investigator Arreola also interviewed Robert Alvarez. Mr. Alvarez reported no abuse. He said that Mariah was not herself shortly before she died. She was holding her head in pain and suddenly showed bruises that Ms. Lucio said arose "easily." Contrary to the testimony at trial that Ms. Lucio appeared to show no emotion about Mariah's death, Mr. Alvarez reported that she "started to shout 'No, No, No,'" when he told her she was not breathing. Ex. 20 at 93 (Arreola Report).

Investigator Arreola interviewed Ms. Lucio's oldest daughter, Little Melissa, on March 29, 2007. *Id*. at 95. No account of that interview was produced to the defense. But Little Melissa told Investigator Arreola that she saw her mother "and Mariah at the washateria a couple of days before Saturday," *id*., which would be the day Mariah fell down the stairs. She stated to Investigator Arreola that "she didn't notice any markings or bruises" on Mariah. *Id*. Rather, "Mariah was doing well when she saw her and … was eating and playing." *Id*.

3. Prosecutors used delay tactics to violate Brady and prevent trial counsel from making use of exculpatory information

The trial court told Villalobos's team to produce Dr. Farley's preliminary report to the defense. Although Asst. District Attorney Krippel told the court he would fax it to Mr. Gilman on September 7, 2007, it has never been produced. On September 19, 2007, at 8:19 a.m., Dr. Farley's office faxed her final report to Villalobos's team. Ex. 54 (Fax Autopsy Cover Sheet). They did not disclose it to the defense until October 5, 2007. *Id.* At that time, the trial was scheduled to begin on February 4, 2008. *See* 6 RR 3.

Hearings on the non-production of CPS records and other materials continued throughout the pretrial period and into the trial.[77] Throughout

[77] *See* 3 RR 7-8 (June 28, 2007, ore tenus order directing ADA Krippel to produce all CPS records for in camera inspection); *id.* at 10-11 (ore tenus directive to produce all records responsive to defense discovery motion); 4 RR 3 (prosecutor announcing on Aug. 3, 2007, that the State "provided everything to the defense"); 1 CR 72-73 (State files "Rule 11 Agreement on CPS Document Discovery" purporting to produce all records at 9:06 a.m. on Aug. 29, 2007); 1 CR 42-43 (Aug. 29, 2007, filing at 3:11 p.m. in which State objects to production of CPS records); 6 RR 3-4 (Sept. 7, 2007, hearing at which prosecution represents it has produced additional CPS records); Ex. 55 (11/27/2007 Subpoena) (ADA Mary Jane Zamarippa files subpoena for records); 10 RR 4-11 (Jan. 30, 2008, hearing at which State reveals "that Mrs. Mary Jane Zamarippa has put together" 450-500 pages of CPS materials); 11 RR 9-14 (June 25, 2008, hearing on failure to produce CPS records to the defense); 33 RR 104-106 (July 3, 2008, third day of trial, State explains it did not provide videotapes of Maggie's House

the trial and state habeas review, prosecutors claimed they lacked access to information in the possession of CPS, and that CPS was not covered by *Brady* because they were not part of law enforcement. 30 RR 3-7 (ADA Krippel blaming CPS for non-production); 30 RR 16-17 (ADA Krippel stating that ADA Moore has all CPS records but they are for a different case; judge says that "bothers me" but goes no further); 31 RR 6 (ADA Padilla saying CPS was so upset about prosecutors possessing documents that they threatened to take action against him); 33 RR 185-186; 2 Supp. WCR 98-99. Those statements were misleading, at best. *See* 31 RR 9-11 (CPS attorney Smith telling court ADA Krippel "did not follow the protocol" for production and did not notify CPS of the need to produce until 9:15 p.m. on June 23, 2008).

Investigator Arreola states in her declaration that her superior, Special Investigator Ledesma, routinely shared information from their work with law enforcement who worked on the criminal case. Ex. 19 at ¶ 7 (Arreola Dec.). Therapist Juarez also states in his declaration that it

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interviews in previous discovery, court orders them disclosed during lunch); 33 RR 107 (ADA Padilla announces he did not produce videotapes to the defense during lunch); 33 RR 158-159 (hearing on State's failure to disclose all written and recorded statements by Robert Alvarez).

was routine for law enforcement officers and attorneys from the DA's office to participate in "staffings," meetings on cases during which information would be discussed, including information gleaned in therapy sessions. Ex. 36 at ¶¶ 11, 12 (Juarez Dec.).

These revelations shed new light on the *Brady* and *Massiah*/*Henry* claims Ms. Lucio presented in her initial habeas application. Ms. Lucio respectfully suggests this Court reconsider those claims on its own initiative pursuant to Texas Rule of Appellate Procedure 79.2(d).

In her initial habeas application, Ms. Lucio asserted that Villalobos's team violated *Brady* by failing to disclose videotaped interviews with Rene, Richard, and Bobby Alvarez conducted by CPS at a place called Maggie's House. 1 WCR 72-76, 138. As discussed *supra*, Ms. Lucio's defense counsel did not learn about the interviews until the third day of trial, 33 RR 104-106, long after the prosecution and CPS represented to counsel that they had hand-delivered all materials related to the investigation. *See*, *e.g.*, 1 CR 72-73; 4 RR 3.

Villalobos's team responded to Ms. Lucio's initial *Brady* claim by asserting that delays in the production of CPS records were due to CPS, not Villalobos. 2 Suppl. WCR 99-102 (State's Ans.). Villalobos presented

the trial court with a finding that the delays "were a result of CPS' failure to comply with this Court's order to produce them," 3 Suppl. WCR 18, and the trial court rubber-stamped it without holding a hearing. With regard to the Maggie's House videotapes, Villalobos persuaded the court to rubber-stamp the objectively false claim that the court reviewed the videos *in camera* and concluded they contained no *Brady* material. *Id*. And yet, the videos contained an eyewitness account of Mariah falling down the stairs, getting a bruise on her eye and arm, and statements from three of Ms. Lucio's children that none of the children were abused. *See* 2 WCR 327-29; 2 WCR 345; 2 WCR 319-21; 2 WRC 348-49.

D. The State Continues To Suppress Evidence Favorable to Ms. Lucio's Defense

Evidence presented here shows the State continues to suppress evidence. Investigator Arreola's reports have been heavily redacted even though all the children mentioned there are now adults. Ex. 19 at ¶ 10 (Arreola Dec.). Her recorded interviews have not been disclosed. The CPS form 2054, explaining who called for Mr. Juarez to "counsel" Ms. Lucio and why, has not been disclosed. *See* Ex. 36 at ¶ 6 (Juarez Dec.).

Prior to trial, prosecutor Joe Krippel told the court that he had seen a preliminary report from Dr. Farley. 6 RR 4-5. He expressed surprise

that the preliminary report had not been produced to the defense and vowed to fax it to Mr. Gilman later that day. *Id.* To this day, the preliminary report has not been produced to the defense.

E. The Suppressed Evidence Was Material

All of the evidence presented here must be viewed cumulatively with the evidence produced late at trial. "When … the probative force of evidence depends on the circumstances in which it was obtained and those circumstances raise a possibility of fraud, indications of conscientious police work will enhance probative force and slovenly work will diminish it." *Kyles*, 514 U.S. at 446.

The sequence in which the prosecution presented its case at trial shows the Villalobos team realized that the probative force of Ms. Lucio's supposed confession to abuse, which they presented first, depended on evidence that abuse actually occurred, which they presented later, through Dr. Farley. The suppressed evidence—including that no one in a family of 12, living in tiny apartments, saw any abuse take place, no one heard it, no one saw any outward signs of it (such as bruising or bite marks, or Mariah suffering from a "painful" injury to her arm)—undermined Dr. Farley's account that this was the worst case of abuse she had

ever seen. Villalobos's team made sure the jury did not hear the family's accounts.

Alexandra's statements to Investigator Arreola and Harlingen police on the night Mariah died contradicted the Villalobos team's story of abuse. In both, Alexandra says she and her parents thought Mariah became ill the day before she died because she ate a bad tamale. Ex. 20 at 90 (Arreola Report); Ex. 22 at 1 (Alexandra Lucio Statement). Alexandra gave these statements to investigators who were specifically looking for evidence of abuse. Alexandra told Investigator Arreola that the bruise on Mariah's eye came from the fall, and that the only other bruise she saw on Mariah was on her back. She told Investigator Arreola that Ms. Lucio spanked the children "on their butt" but she did not "didn't believe that her mother would hit Mariah." Alexandra's account is corroborated in the suppressed statement her younger sister Selina gave to Investigator Arreola corroborating Ms. Lucio's account of Mariah falling down the stairs and stating Ms. Lucio "wouldn't hit" her children. Ex. 20 at 90 (Arreola Report).

Dr. Farley claimed Mariah sustained a broken arm a week or two before she died. 34 RR 29. The suppressed, sworn statement of Daniella

Lucio, given to Harlingen police the night Mariah died, included Daniella's observation that her "little sister Mariah Alvarez looked really healthy and active" in the weeks preceding her death. Ex. 24 at 1 (Daniella Lucio Statement). Indeed, no one in the family reported Mariah showing signs of having a broken arm. Yet, Dr. Farley (erroneously) described a fracture so painful, Mariah would have been complaining about it. 34 RR 30.

Alexandra's suppressed account of Ms. Lucio trying to get Mariah to drink supported the defense theory that Mariah's health declined after the fall, and undermined Dr. Farley's suggestion that Mariah's dehydration was related to abuse. *Id*. at 31; Ex. 20 at 91 (Arreola Report).

Evidence is material, and a new trial is required, if "disclosure of the suppressed evidence *to competent counsel* would have made a different result reasonably probable." *Kyles*, 514 U.S. at 441 (emphasis added).

Police and prosecutors suppressed statements from 7 of Ms. Lucio's children—Little Melissa, Daniella, Alexandra, Selina, Rene, Richard, and Bobby—stating or indicating that Mariah was not abused, that she became ill after falling down the stairs, that she did not complain of a broken arm, and did not have bruises all over her body until the day she

died. They also suppressed evidence that Robert Alvarez did not witness abuse of Mariah and did not notice bruises on her until shortly before she died. They also suppressed the observations of Jose Guerrero that contradicted or impeached his wife June Thompson's report of hearing abuse and seeing bruises on Mariah. They suppressed Ms. Thompson's sworn statement and its self-impeaching content. Police and prosecutors also misrepresented the relationship between law enforcement and CPS to falsely justify delayed disclosures and provide cover for the suppression of Investigator Arreola's reports.

Together, the suppressed evidence supports other new expert evidence demonstrating that Ms. Lucio's purported "confession" to abuse was false. The many suppressed reports of no abuse would have led any competent defense attorney to investigate another explanation. The reports of Drs. Ophoven, Laposata, Freeman, and Sullivan show that investigation would have completely undermined Dr. Farley's credibility and the credibility of the entire "investigation." There is far more than a reasonable probability that a jury who heard the overwhelming evidence that Mariah was not abused would have acquitted Ms. Lucio of capital

murder. Accordingly, Ms. Lucio's execution must be stayed, and her conviction must be vacated

The accounts of Daniella, Alexandra, Selina, Rene, Richard, and Robert—that Ms. Lucio did not ever abuse any of the children, that Mariah's fall was witnessed and known to the family, and Mariah's health became increasingly concerning and declined in the days following her fall—would have triggered a search for an explanation of how a child who had not been abused came to be covered in bruises. In addition to presenting the jury with testimony from these critical eyewitnesses and law witnesses, the declarations of Drs. Ophoven, Laposata, Freeman, and Sullivan discussed in Claim 1, *supra*, show what competent counsel could have obtained through further investigation had the suppressed evidence been disclosed.

F. This Claim Is Reviewable Under Article 11.071, § 5(a)(1)

Ms. Lucio discovered the CPS records of Investigator Arreola's work on the case by requesting them from CPS. Ex. 39 (Weber Dec.). At trial, and throughout Ms. Lucio's prior habeas proceedings, the State maintained that it had obtained and disclosed all CPS records related to Ms. Lucio and her children. *E.g.*, 4 RR 3 (ADA Krippel advising court that

State "provided everything to the defense"); 1 CR 72-73; 10 RR 10-11; 31 RR 4; 2 Supp. WCR 98-99. Ms. Lucio and her counsel were entitled to rely on those representations and had no duty to investigate whether Villalobos and his lawyers were lying. *Banks*, 540 U.S. at 693; *Strickler*, 527 U.S. at 283-84.

Ms. Lucio discovered the sworn statements of Alexandra and Daniella Lucio in 2019 when her counsel inspected the District Attorney's files in the case. Ex. 39 (Weber Dec.). Again, Ms. Lucio and her counsel were entitled to rely on the State's representations that all exculpatory material had been disclosed to trial counsel.

The Villalobos team had an "affirmative duty" under the Constitution, *Kyles*, 514 U.S. at 432, "to learn of any favorable evidence known to the others acting on the government's behalf in the case, including the police," and produce that evidence to Ms. Lucio *prior* to trial, *id*. at 437. Because the Constitution placed that duty on the prosecution, and there is a legal presumption that prosecutors act accordingly, "the exercise of reasonable diligence," art. 11.071, § 5(e), did not require that Ms. Lucio "scavenge for hints of undisclosed *Brady* material," *Banks*, 540 U.S. at

695, "on or before" her initial habeas application was due, art. 11.071, § 5(e).

Finally, because the materiality of suppressed evidence must be assessed cumulatively, the present claim did not become ripe until Ms. Lucio's counsel uncovered the suppressed evidence contained in the District Attorney's files and the CPS files, and interviewed to learn what police omitted from their sworn statements.

VI. CLAIM 6: THE STATE VIOLATED MS. LUCIO'S SIXTH AMENDMENT RIGHT TO BE FREE FROM UNCOUNSELED PRETRIAL INTERROGATION

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

Nearly one year after Ms. Lucio was arrested and charged with capital murder, CPS sought a court order for a therapist to meet with Ms. Lucio. The therapist retained by CPS, and paid by the State, was Beto Juarez, who has recently given a declaration. Ex. 36 at ¶ 6 (Juarez Dec.) His reports of what Ms. Lucio told him were given to the prosecutors in the capital case, and used—misleadingly—during the prosecutor's cross-examination of Ms. Lucio's mitigation specialist, Norma Villanueva. 38

RR 27-31; Ex. 36 at ¶ 19 (Juarez Dec.). Reports of Mr. Juarez's sessions with Ms. Lucio that were favorable to Ms. Lucio's defense were withheld from the defense. *See* Claim 5, *supra*.

The Sixth Amendment guarantees a defendant the "right to be free of uncounseled interrogation." *Kansas v. Ventris*, 556 U.S. 586, 592 (2009). "[T]he deliberate elicitation by law enforcement officers (and their agents) of statements pertaining to the charge" violates that right. *Id*. at 590 (citing *Massiah v. United States*, 377 U.S. 201, 206 (1964)). Deliberate questioning of a defendant outside the presence of counsel "'contravenes the basic dictates of fairness in the conduct of criminal causes.'" *Massiah*, 377 U.S. at 205. It does not matter whether the evidence is used at trial; the right "is infringed at the time of the interrogation." *Ventris*, 556 U.S. at 592.

Ms. Lucio raised the issue of Mr. Juarez's uncounseled questioning in her initial habeas application. 1 WCR 36-38. The State responded by ignoring the relevant Sixth Amendment precedent from the Supreme Court, and relied upon the Fifth Amendment cases from this Court. 2 Suppl. WCR 14-15. The State also relied upon inconsistent testimony from Johanna Estrada, a CPS agent. *Id*. at 16.

Estrada's testimony was misleading in addition to being inconsistent. It is true that the court in which the CPS case was pending ordered therapy for Ms. Lucio, but that says nothing about whether Mr. Juarez was an agent of the State. The order in the CPS case did not appear out of thin air, it had to be sought through a motion. That motion was filed by an attorney, and that attorney worked for the District Attorney prosecuting Ms. Lucio, Armando Villalobos. 30 RR 17. That is a sufficient basis for finding that Mr. Juarez was an agent of the State who deliberately elicited statements about the charge from Ms. Lucio outside the presence of her counsel.

But there's more. The State claimed Mr. Juarez could not have been a government agent because he was "not an employee of Child Protective Services," only "under contract." 2 Suppl. WCR 16. As Mr. Juarez explains in his declaration, he was paid by the State. Ex. 36 at ¶ 6 (Juarez Dec.). The Supreme Court has found Sixth Amendment violations where the agent did not receive any financial compensation from the government. *Ventris*, 556 U.S. at 589 (describing use of a "planted … inform-

ant" without mentioning compensation); *Massiah*, 377 U.S. at 202-03 (describing use of planted agent who used a radio to relay information to law enforcement).

In *United States v. Henry*, 474 U.S. 264 (1980), the Supreme Court found a *Massiah* violation where the government paid an informant but instructed him *not to* question the defendant about the charges. 474 U.S. at 268. Nevertheless, the Court found a *Massiah* violation where the government instructed a jail inmate who was paid informant to speak with the defendant and listen for comments he made about the charges. The Court's reasoning applies here: "Conversation stimulated in such circumstances may elicit information that an accused would not intentionally reveal to persons known to be Government agents." 474 U.S. at 273.

Psychotherapy "depends upon an atmosphere of confidence and trust in which the patient is willing to make a frank and complete disclosure of facts, emotions, memories, and fears." *Jaffee v. Redmond*, 518 U.S. 1, 10 (1996). The State's decision to initiate psychotherapy with Ms. Lucio while she was awaiting trial on capital charges raises at least an inference that the goal was to elicit incriminating statements.

That is, indeed, how Mr. Juarez saw it. Ex. 36 at ¶ 12 (Juarez Dec.). He noted that there was no requirement that CPS seek counseling for a parent whose rights CPS was trying to terminate. *Id.* at ¶ 7. Ms. Lucio was facing capital murder charges. The State waited nearly a year after her arrest to initiate the "therapy." All of these circumstances—the discretionary decision to seek therapy for a defendant accused of murdering her toddler, the jailhouse meetings, and the long delay before initiation of therapy—indicated to Mr. Juarez that CPS hoped he would obtain incriminating statements from Ms. Lucio. *Id.* at ¶12. Those circumstances are materially indistinguishable from *Henry*.

And lest there be any doubt about whether these sessions were really about psychotherapy or the capital murder case, after his last session with Ms. Lucio, Mr. Juarez attended a case "staffing" that included a lawyer from the District Attorney's Office. *Id.* at ¶ 13. The lawyer did not discuss the CPS case. He discussed the then-pending plea negotiations between the prosecution and the defense. *Id.*

And there is more evidence that the State misled this Court and the trial court about the relationship between CPS and law enforcement during the "investigation" of this case. CPS Investigator Arreola states in

her declaration that her partner, Special Investigator Ledesma, exchanged information with law enforcement during their investigation. Ex. 19 at ¶7 (Arreola Dec.).

Ms. Lucio has presented more than a prima facie case that the State deliberately elicited uncounseled statements from her in violation of her Sixth Amendment rights. Cherry-picked examples of those statements were misleadingly used against Ms. Lucio to secure a death sentence. 38 RR 26-31. The Supreme Court in *Ventris* permitted the use of a defendant's illegally obtained statements to impeach him if he testifies, 556 U.S. at 593-94. But it has never permitted the use to impeach another defense witness. The State's reliance on the statements illegally obtained by Mr. Juarez requires a new trial.

Ms. Lucio's innocence of murder and her innocence of the death penalty make this Claim reviewable. Additionally, throughout trial and initial habeas proceedings, the State affirmatively misled Ms. Lucio, her counsel, the trial court, and this Court about the collaborative investigatory relationship between law enforcement and CPS in this case. For the reasons stated in Claim 5, *supra*, Ms. Lucio was entitled to rely on those representations, even though they were false. That is, due diligence

therefore did not require her to investigate whether the State's representations about Mr. Juarez's being a state agent were false, and this claim is reviewable under §§ 5(a)(1) and (e) of Article 11.071.

VII. CLAIM 7: MS. LUCIO'S CONVICTION AND DEATH SENTENCE ARE TAINTED BY JUROR MISCONDUCT

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

The judgment of conviction and sentence of death imposed on Ms. Lucio is invalid and must be vacated due to the misconduct of jurors. One juror lied about his ability be fair and consider a sentence less than death. Several jurors falsely answered yes in response to the future dangerousness special issue. Another juror was persuaded to change his vote for a life sentence by another juror's biblical argument. Individually or considered together, these violations of the jurors' oaths violated Ms. Lucio's rights to due process of law, a fair trial before an impartial jury, and an honest determination of her eligibility for a death sentence as guaranteed by the Sixth, Eighth, and Fourteenth Amendments to the United States Constitution.

The Sixth Amendment "guarantees to the criminally accused a fair trial by a panel of impartial, 'indifferent' jurors." *Irvin v. Dowd*, 366 U.S. 717, 721 (1961). Consequently, no judgment in a criminal case may stand if a single biased juror participated in rendering the verdict. *Gomez v. United States*, 490 U.S. 858, 876 (1989) ("Among those basic fair trial rights that can never be treated as harmless is a defendant's right to an impartial adjudicator, be it judge or jury.") (internal quotation marks omitted)); *Parker v. Gladden*, 385 U.S. 363, 366 (1966) ("petitioner was entitled to be tried by 12, not 9 or even 10, impartial and unprejudiced jurors").

"'Impartiality is not a technical conception. It is a state of mind.'" *Irvin*, 366 U.S. at 724 (quoting *United States v. Wood*, 299 U.S. 123, 145 (1936)). Jurors in Ms. Lucio's case did not possess an impartial state of mind. They violated the trial court's instructions and Ms. Lucio's right to the presumption of innocence when they based their guilty verdict on Ms. Lucio's failure to present testimony from her other children. As Juror Ernestina Espinosa states in her recent declaration, "The jury wanted

to hear from Melissa's children, especially the older children. During deliberations, we discussed why the children didn't come to court to defend Melissa if she hadn't abused Mariah." Ex. 38 at ¶ 3 (Espinoza Dec.).

The Constitution does not permit jurors to draw an inference of guilt from a defendant's failure to adduce evidence of innocence. *Taylor v. Kentucky*, 436 U.S. 478, 485 (1978) ("[O]ne accused of a crime is entitled to have his guilt or innocence determined solely on the basis of the evidence introduced at trial, and not on grounds of official suspicion, indictment, continued custody, or other circumstances not adduced as proof at trial"); *Carter v. Kentucky*, 450 U.S. 288, 301 (1981) ("defendant must pay no court-imposed price for the exercise of his constitutional privilege not to testify"). Consequently, Texas courts reverse criminal convictions where the jury considered a defendant's failure to testify. *E.g.*, *Reyna v. State*, 846 S.W.2d 498, 502-503 (Tex. App.—Corpus Christi-Edinburg 1993). Ms. Lucio's jury's consideration of her children's failure to testify denied Ms. Lucio the presumption of innocence and the right to demand the State prove its case beyond a reasonable doubt, as the Sixth and Fourteenth Amendments required.

Juror Erminio Cruz did not possess an impartial state or mind. He was so biased in favor of the prosecution that he declared, "If a prosecutor knew what I think they would put me on every jury." Ex. 49 at 1 (Cruz Dec.). Juror Cruz's alignment with the prosecution prevented him from fulfilling "the jury's role as 'a vital check against the wrongful exercise of power by the State.'" *Pena-Rodriguez v. Colorado*, 137 S. Ct. 855, 868 (2017) (quoting *Powers v. Ohio*, 499 U.S. 400, 411 (1991)).

Regarding his ability to consider a sentence less than death as the law requires, Juror Cruz states, "I … don't have sympathy. I think every time someone is found guilty of murder they should be hung." Ex. 49 at 1 (Cruz Dec.). If Juror Cruz had disclosed during voir dire his refusal to consider a sentence other than death, the Constitution would have required his exclusion from the jury. *Morgan v. Illinois*, 504 U.S. 719, 729 (1992).

As the Supreme Court explained in *Morgan*,

> A juror who will automatically vote for the death penalty in every case will fail in good faith to consider the evidence of aggravating and mitigating circumstances as the instructions require him to do. Indeed, because such a juror has already formed an opinion on the merits, the presence or absence of either aggravating or mitigating circumstances is entirely irrelevant to such a juror. … If even one such juror is empaneled and the death sentence

> is imposed, the State is disentitled to execute the sentence.

Id.[78] Juror Cruz performed exactly as *Morgan* envisioned a juror with his bias would. Juror Cruz acted according to his personal biases in favor of the State and a death sentence by giving an affirmative response to the future dangerousness special issue even though he says, "I did not and do not think Melissa is a danger to others. This is not something we discussed in deliberations and did not impact our decision." Ex. 49 at 2 (Cruz Dec.).

And Juror Cruz was not alone in giving a false and biased response to the future dangerousness special issue. Juror Alejandro Saldivar also states that the future dangerousness verdict was not a fair expression of the jurors' opinion. He, too, states: "The jury did not think Melissa was a future danger and we did not consider that when sentencing her to death." Ex. 56 at 2 (Saldivar Dec.).

Juror Cruz's recent statements contradict his testimony under oath before and after Ms. Lucio's trial. Juror Cruz said "No" when he was asked if he had "any reservations" or felt that it was "an improper law"

[78] *See also id.* at 735 ("Any juror who would impose death regardless of the facts and circumstances of conviction cannot follow the dictates of law.").

to deem only some murders eligible for the death penalty. 16 RR 10-11. He also said he could consider a life sentence for a person who "murdered a child under six years of age." *Id*. at 12.

Juror Cruz stated under oath that he understood that if he answered "no" to the FDSI, "then the Court would be bound to give … a life sentence without parole." *Id*. at 16. He also vowed "to deliberate and attempt to answer these [special issue] questions." *Id*. at 17. Thus, when Juror Cruz answered "yes" to the FDSI despite his findings that Ms. Lucio was not a future danger, he was knowingly misrepresenting his views with the understanding that his misrepresentation would result in her wrongfully being sentenced to death.

If Juror Cruz had not concealed his bias by giving false answers on voir dire, Ms. Lucio could have excused him for cause. If jurors had not concealed his—and their own—violation of their oath by rendering a false verdict on future dangerousness, Ms. Lucio would have been entitled to a new trial. Pursuant to Texas Rule of Appellate Procedure 21.3(c), "[a] defendant must be granted a new trial 'when the verdict has been decided by lot or in any manner other than a fair expression of the jurors' opinion.'" *Jennings v. State*, 107 S.W.3d 85, 90 (Tex. App.—San Antonio 2003)

(quoting Rule 21.3(c) and invalidating conviction where juror voted to convict based solely on whether a list of facts suggesting guilt was longer than a list of facts suggesting innocence).

The declarations of Jurors Espinoza, Cruz, and Saldivar establish that Ms. Lucio was denied a fair trial before a fair and impartial tribunal. She was convicted and sentenced to death based on the absence of evidence, not proof beyond a reasonable doubt. And she was sentenced to death by biased jurors who violated their oath and instructions to reach an illegitimate verdict.

No duty of diligence required Ms. Lucio's counsel to investigate these jurors earlier. *See* Tex. Code Crim. Proc. art. 11.071, § 5(e). Each of them stated during voir dire that they could and would decide the case based solely on the evidence adduced at trial and in compliance with the law on which they were instructed. Ms. Lucio was entitled to rely on the legal presumption that "the jury follows the trial court's instructions in the manner presented." *Thrift v. State*, 176 S.W.3d 221, 224 & n.10 (Tex. Crim. App. 2005). Her jury was instructed to consider only the evidence adduced at trial and to give honest answers to the special issues. Ms. Lucio's discovery that jurors violated their instructions was the result of

serendipity. Accordingly, her claim is reviewable here. Tex. Code Crim. Proc. art. 11.071, § 5(a)(1).

In addition, because Ms. Lucio can establish both innocence of capital murder and that she would not have been sentenced to death, her claim is reviewable here. *See* Art. 11.071, §§ 5(a)(2) & (3).

VIII. CLAIM 8: GENDER BIAS TAINTED MS. LUCIO'S CAPITAL MURDER PROSECUTION AND CONTRIBUTED TO HER WRONGFUL CONVICTION

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

Ms. Lucio's identity as a woman—and her supposed deviation from pernicious gender stereotypes—animated the police who interrogated her and the prosecutors who secured her conviction and death sentence. The police treated her differently from her male partner, Robert Alvarez, even though both had caretaking responsibilities for Mariah. They homed in on Ms. Lucio as a suspect because she seemed different from the women who lived in their imaginations. Her failure to express feminine emotions at the "appropriate" time featured in the testimony of seven witnesses at trial, and was ultimately highlighted by two prosecutors as a reason to

sentence her to die. At the penalty phase, the State's argument that Ms. Lucio posed a continuing threat to society centered on Ms. Lucio's biological capacity as a woman to become pregnant while incarcerated. The prosecution's invocation of the "immutable characteristic" of Ms. Lucio's sex as a valid consideration in determining her sentence impermissibly invited the jury to condemn Ms. Lucio not for what she did, but for who she was. That was patently unconstitutional. *See Buck v. Davis*, 137 S. Ct. 759, 778 (2017) ("Our law punishes people for what they do, not who they are. Dispensing punishment on the basis of an immutable characteristic flatly contravenes this guiding principle.").[79]

A. Negative Gender Stereotypes Animated The Differential Treatment Of Ms. Lucio And Her Partner

From the moment they arrived at the scene of Mariah's death, police and first responders formed judgments about Ms. Lucio that were rooted in their perceptions of how a grieving mother should behave. 32 RR 27; 33 RR 72-23, 92. These visceral impressions led them to target

[79] The Supreme Court's 2017 decision in *Buck v. Davis* established for the first time that even glancing references to negative stereotypes based on an "immutable characteristic" of the defendant violate the U.S. Constitution. 137 S. Ct. at 765. As the legal basis for this claim was not available on the date of Ms. Lucio's prior application for habeas relief, she is entitled to merits review of this claim. Tex. Code Crim. Proc. 11.071, § 5(a)(1).

her as a suspect even before they had gathered any evidence in the case. This fact bears repeating: at the time the police began questioning each parent, they had *no evidence* that *either* parent had abused Mariah. Yet their treatment of Ms. Lucio stands in stark contrast to their approach to Robert Alvarez, Ms. Lucio's partner and Mariah's father.[80] Although Ms. Lucio and Mr. Alvarez shared caretaking responsibilities for Mariah, the police treated Mr. Alvarez as a victim and Ms. Lucio as a suspect from the outset. Given that Mr. Alvarez had a history of familial violence[81] and Ms. Lucio did not, the differential treatment of the two parents bears unmistakable hallmarks of gender discrimination.

To begin with, the two police officers interrogating Mr. Alvarez displayed empathy, deference, and camaraderie. Before asking a single question, Officer Villarreal expressed sympathy for Mr. Alvarez's loss. Referring to Mr. Alvarez as "sir," Officer Villarreal apologetically stated that he must ask some "uncomfortable" questions, then asked if Mr. Alvarez had hurt Mariah. Ex. 44 at 3 (Robert Alvarez Interrogation Tr.). After Mr. Alvarez responded "no," the officers did not press him further.

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[80] Although Mr. Alvarez was not Mariah's biological father, he treated her as his daughter. *See* Ex. 44 at 76-77 (Robert Alvarez Interrogation Tr.).

[81] Ex. 53 (Robert Alvarez Police Reports) (describing assaultive behavior).

Id. Much later, Officer Villarreal again asked, "You didn't hurt her?" *Id.* at 53. When Mr. Alvarez again denied hurting Mariah, the police did not challenge him. *Id.* Throughout the interrogation, the police allowed Mr. Alvarez to speak without interruption. They asked how he disciplined his children, and he admitted to spanking them. *Id.* at 59-62. Rather than bringing out a doll to ask Mr. Alvarez to demonstrate his disciplinary methods (as they did with Ms. Lucio), they merely asked a few follow-up questions before focusing their questioning on *Ms. Lucio's* disciplining of the children. *Id.* at 62. Later, they shifted more forcefully into gathering evidence against Ms. Lucio, repeatedly suggesting that Mr. Alvarez was covering for his wife. *Not once* did they directly accuse Mr. Alvarez of killing his daughter, beating her, causing her bruises, or otherwise harming her. Ex. 15 at 12 (Leonard Report).

In a declaration submitted with this supplemental application, forensic linguist Professor Robert Leonard concludes that the language used by police interrogating Mr. Alvarez is largely consistent with an effort to gather information, rather than assign blame. *Id.* at 8 (noting that the interview of Mr. Alvarez was consistent with "information gathering," while the interview of Ms. Lucio was "accusatory"). By contrast, the five

officers who interrogated Ms. Lucio assumed that she was to blame from the outset. While they never directly accused Mr. Alvarez of harming Mariah, they accused Ms. Lucio of hurting Mariah *29 times*. *Id.* at 12. They displayed no empathy or deference towards her. They used language that sought to blame her for Mariah's injuries. They rejected her repeated assertions of innocence. They did not allow her to complete her thoughts: whereas the police only interrupted Mr. Alvarez once, they interrupted Ms. Lucio *over 70 times* "while she was trying to answer or defend herself.[82] *Id.* at 10. They sought to intimidate her. They used threats of violence against her. They repeatedly accused her of harming, bruising, and biting Mariah. *Id.* at 12-13. They told her that she looked like a "cold-blooded killer." *Id.* at 12. And they used tactics that have now been widely condemned for their tendency to elicit false confessions. For a woman who was a survivor of lifelong gender-based violence, these tactics were devastating.

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[82] Numerous studies have demonstrated that male speakers often interrupt female speakers as a way of expressing dominance. *See* Keith E. Campbell, David M. Kleim, & Kenneth R. Olson, *Conversational Activity and Interruptions Among Men and Women*, 132 J. of Soc. Psych. 419–20 (1992). As every woman can appreciate, "men tend to speak longer than women do" and "tend to interrupt more often than women do." *Id.* at 420 (internal citations omitted).

Professor Leonard also notes that police repeatedly invoked Ms. Lucio's caretaking role during their interrogation, seeking to provoke self-blame—and a confession—for failing to live up to her role as a mother. *Id.* at 21. They repeatedly pressure her to confess "as a mom:" "You need to come out clean and tell us. At least as, *as a mom*, do it for Mariah." *Id.* "[I]t should come out from you. *You're the mom*. . . ." *Id.* "*If you're such a good mother*, you need to stand up for her right now and tell us exactly what happened." *Id.* "Can you even speak out *as a mom*? I mean that's the very least you can do *as a parent* for your little one not here anymore." *Id.* at 22. "[A]re you going to step up *as a parent*? I mean you love your daughter, right?" *Id.* They also criticized her mothering, including the nutritional content of the meals she fed Mariah. With Mr. Alvarez, by contrast, they did not attempt to assign blame or provoke a sense of shame over his failures as a father. Rather, the police interviewer expressed sympathy for the stress of being a father: "I can identify with it. I have only two kids. But they take so much time." *Id.* These differences

underscore how police targeted Ms. Lucio, at least in part, *because* she was a mother.[83]

The starkly differential treatment of Ms. Lucio and Mr. Alvarez by the police ultimately led to their disparate treatment by prosecutors. Because the police credited Mr. Alvarez's account, he did not confess to something he did not do. At the same time, the police pressured him to assign blame to Ms. Lucio—consistent with their uncorroborated theory that she was responsible for Mariah's death. The aggressive tactics the police used with Ms. Lucio, by contrast, eventually caused her to acquiesce to their insistent demands that she admit responsibility. Armed with Ms. Lucio's confession, District Attorney Armando Villalobos charged Ms. Lucio with capital murder—but only charged Mr. Alvarez with "causing injury to a child by omission." At trial, Mr. Alvarez received a four-year sentence, and is now a free man.

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[83] The stereotype of a "bad" or "unfit" mother is a hallmark of Western law and literature. Marie Ashe, *The Bad Mother in Law and Literature*, 43 HASTINGS L. J. 1017 (1992). Researchers note that the shaming of mothers in American society often has explicit racial connotations. Alison Diduck, *In Search of the Feminist Good Mother*, 7 Soc. & Legal Stud. 129, 133-34 (1998).

B. The Prosecution Repeatedly Weaponized Ms. Lucio's Gender In Arguing She Should Be Executed

At the penalty phase of trial, the prosecution explicitly and repeatedly weaponized Ms. Lucio's gender in arguing for her death. And the prosecution's contention that no mitigating factor favored a sentence of life imprisonment likewise rested on an image of Ms. Lucio woven almost exclusively from pernicious gender stereotypes: that she was a woman who had fallen short of her societal duty to be an ideal "mother" and that she failed to exhibit the emotions stereotypically expected of her gender in response to the traumatic circumstances of Mariah's death.

The deployment of gender to obtain Ms. Lucio's capital sentence violates constitutional guarantees of due process, equal protection, and dignity. A jury's imposition of the death penalty cannot stand when a prosecutor's prejudicial remarks "so infected the sentencing proceeding with unfairness as to render the jury's imposition of the death penalty a denial of due process." *Romano v. Oklahoma*, 512 U.S. 1, 12 (1994) (citing *Donnelly v. DeChristoforo*, 416 U.S. 637, 643 (1974)). Moreover, subjecting an individual to the death penalty based upon a proceeding tainted by a prosecutor's appeals to discriminatory stereotypes violates the Constitution's guarantee that the accused in a criminal case will be treated with

dignity. *See Woodson v. North Carolina*, 428 U.S. 280, 304 (1976) (emphasizing the "fundamental respect for humanity underlying the Eighth Amendment" in reasoning that the Constitution requires individualized sentencing in capital cases); *Trop v. Dulles*, 356 U.S. 86, 100 (1958) (plurality opinion) ("The basic concept underlying the Eighth Amendment is nothing less than the dignity of man.").

The State's arguments for sentencing Ms. Lucio to death were relentlessly grounded in her gender, contrary to these constitutional guarantees. The State predicated its case for future dangerousness almost exclusively on the fact that Ms. Lucio was, at the time, a woman of childbearing age: the prosecution shamelessly argued that Ms. Lucio could become pregnant in prison (necessarily through rape by a corrections officer, though the State did not frame the risk in those terms) and then could pose a future risk to children so conceived while she was in the custody of the State (leaving aside the State's own control of a visitation environment). 38 RR 37, 103. Assistant Criminal District Attorney Alfredo Padilla, questioning defense witness Norma Villanueva, asked what would happen "if an individual, obviously a female individual, becomes pregnant while incarcerated," suggesting that such a circumstance

would afford opportunity for Ms. Lucio to have contact with children while serving a life sentence. 38 RR 37. Along similar lines, District Attorney Armando Villalobos confronted defense witness Dr. Jonathan Pinkerman about the fact that Ms. Lucio "had twins while she was incarcerated" to undercut Dr. Pinkerman's testimony that Ms. Lucio would not have access to babies or young children in prison. *Id.* at 103. Villalobos emphasized that "inmates do get pregnant in the prison system" and elicited Dr. Pinkerman's agreement that Ms. Lucio "is still within the childbearing years." *Id.* at 107-08. The State thus simultaneously argued that Ms. Lucio was a future danger *because* of her gender *and* that her failure to conform to other gender expectations sufficed to warrant a death sentence.

The prosecution's cynical weaponization of Ms. Lucio's biological capacity for pregnancy to persuade the jury to impose a death sentence—an argument that would not have been available if Ms. Lucio were a man—infused the proceeding with fundamental unfairness. Just as "[i]t would be patently unconstitutional for a state to argue that a defendant is liable to be a future danger because of his race," *Buck*, 137 S. Ct. at 775, the prosecution's reliance on Ms. Lucio's gender for this aspect of its

case cannot be countenanced. *Cf. J.E.B. v. Alabama ex rel. T.B.*, 511 U.S. 127, 135 (1994) ("While the prejudicial attitudes toward women in this country have not been identical to those held toward racial minorities, the similarities between the experiences of racial minorities and women, in some contexts, overpower those differences." (internal quotation marks and citation omitted)).

At the same time, the prosecution heavily relied on the fact that Ms. Lucio failed to exhibit the type of emotional response expected of a supposedly ordinary woman or grieving mother in her circumstances in order to argue that the case lacked mitigating factors warranting a life sentence. Villalobos, questioning a witness about records of Ms. Lucio's activities following the verdict in the guilt phase of her trial, repeatedly noted that there was no "notation of crying or yelling or screaming or distress" and emphasized that Ms. Lucio had instead spent a significant period of time "lying down or sleeping," implying that her emotional response indicated a lack of motherly love. 37 RR 125-26. Assistant Criminal District Attorney Maria De Ford appealed directly to those same stereotypes in her closing argument, urging the jury to "look at her confes-

sion. Look at her demeanor." 38 RR 145. Referencing the earlier testimony, De Ford scoffed that Ms. Lucio had "slept fine," a fact that "speaks for itself" and indicated "how coldhearted she is." *Id.* De Ford emphasized that Ms. Lucio "shows no sadness, no remorse for what she has done to this little girl." *Id.* Villalobos echoed that rhetoric in his own closing, stating that "she's here crying now" but that "when she's not in front of you, what does she do? She sleeps like a baby. She doesn't show sadness. She doesn't show remorse. But when she's in front, let's turn on the tears. Where were those tears when she was beating Mariah?" *Id.* at 170. Each of these remarks by the prosecution impermissibly harnessed societal expectations of how a woman should respond to the loss of a child, as well as invidious stereotypes of women as emotionally manipulative, to portray Ms. Lucio as deserving of the death penalty.[84]

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[84] *See, e.g.,* Sarah L. Hutson-Comeaux and Janice R. Kelly, *Gender Stereotypes of Emotional Reactions: How We Judge an Emotion as Valid,* 47 Sex Roles 1, 2 (July 2002) (women's lack of emotional reactions is viewed negatively because it "violates stereotypical expectations of women"); Victoria L. Brescoll, *Leading With Their Hearts? How Gender Stereotypes of Emotion Lead to Biased Evaluations of Female Leaders,* 27 The Leadership Quarterly 415 (2016) ("The belief that women are more emotional than men is one of the strongest gender stereotypes held in Western cultures."); Karl Ask*, A Survey of Police Officers' and Prosecutors' Beliefs About Crime Victim Behaviors*, 25(6) Journal of Interpersonal Violence 1132, 1135 (2010) (citing studies demonstrating that rape victims whose self-presentation was numbed not only were perceived as less credible but also were "blamed more for the rape than an emotional victim" and

Moreover, by denying the significance of Ms. Lucio's experiences as a survivor of sexual abuse and domestic violence, the prosecution maximized the impact of its exploitation of gender stereotypes by ensuring that the jury had no framework for understanding why Ms. Lucio's reactions may have deviated from societal norms. *See, e.g.*, 38 RR 161-62 (Padilla ridiculing the notion that Ms. Lucio "was sexually assaulted as a child" and that "she was also a battered woman," suggesting that the defense had fabricated "this issue that she was sexually assaulted…and that she's a battered woman" with the hope "that maybe the jury will buy it," and asserting that "there is no evidence at all concerning the issue of the battered woman" or of a history of sexual abuse); *see also id.* at 142-44 (De Ford brushing aside Ms. Lucio's trauma history as irrelevant and accusing the defense of inventing "excuses").[85] Despite these cruel denials by the prosecution, Ms. Lucio's lifetime of gender-based violence and

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concluding that "the empirical evidence suggests that crime victims' behaviors are gauged against culturally shared stereotypes of normal reactions and that deviations from these stereotypes tend to lower victims' credibility.").

[85] In doing so, the prosecution capitalized upon—and compounded—the court's erroneous exclusion of expert testimony bearing on these issues in the guilt phase. That exclusion—which failed to acknowledge the effects of gender-based violence on victims and accommodate their needs—could itself be understood as a form of gender discrimination.

sexual abuse, and her resulting PTSD and thus altered responses to trauma, are well-documented. *See* Ex. 14 (Brand Dec.); Ex. 9 (Barrett Dec.).

The prosecution infused its penalty phase presentation with numerous other sexist tropes, ultimately making the case for death on the basis that Ms. Lucio ostensibly failed to act the way that a woman should. The prosecution painted Ms. Lucio as promiscuous: Villalobos sought Dr. Pinkerman's agreement that "[t]o have 14 children, that has to be pretty much a conscious act, wouldn't you think?," 38 RR 127, and Padilla invoked similarly loaded language when he asked Ms. Villanueva whether she had "look[ed] at all facts and circumstances surrounding Mrs. Lucio, her children, her husbands, her boyfriends, her lovers?" *Id.* at 21. And the prosecution invoked the rhetoric of an idealized "mother figure" to imply Ms. Lucio's moral failure in decidedly gendered terms. Picking up on these themes in his closing arguments, Padilla insisted that if Ms. Lucio "really loved" her "13 children" the way she was "now attempting to make you believe," then "she would have fed them, she would have clothed them, she would have taken care of them, she would have used

the food stamp money to take care of those children." *Id.* at 163.[86] He mocked the notion that Ms. Lucio's "13 children out there" could serve as a mitigating factor, questioning "[w]hat has she ever done for the 13 children" and insisting that "[s]he's using the 13 children now to get away from her responsibility." *Id.* at 166. In combination, these remarks sought to persuade the jury that Ms. Lucio deserved the death penalty because she failed to embody the stereotype of behavior societally expected of a woman. But while a prosecutor "may strike hard blows, he is not at liberty to strike foul ones." *Berger v. United States*, 295 U.S. 78, 88 (1935).

[86] The prosecution's repeated allusions to the invidious stereotype of a "welfare queen" leeching resources from the public purse to feed her drug addiction instead of her family represents yet another means by which the prosecution laced its presentation with derogatory rhetoric that preyed upon Ms. Lucio's marginalized status in society. *See, e.g.*, Vol. 38 at 144 (De Ford: "The problem in this case she was getting money. She was getting food stamps. She was getting benefits. They were using all of that money for cocaine."); *see also* Carly Hayden Foster, *The Welfare Queen: Race, Gender, Class, and Public Opinion,* 15 Race, Gender & Class 162 (2008) ("The Welfare Queen as a public identity is used to justify class based sexist and racist assumptions about the presumed behavior and moral failures of welfare mothers.").

These circumstances generated the precise kind of "perfect storm" that, as the U.S. Supreme Court has recognized, overcomes any suggestion that a prosecutorial appeal to an immutable characteristic of the defendant was merely "*de minimis*." *Buck*, 137 S. Ct. at 776-77. And as this Court has "long recognized[,] . . . a number of errors may be found harmful in their cumulative effect, even if each error, considered separately, would be harmless." *Linney v. State*, 413 S.W.3d 766, 767 (Tex. Crim. App. 2013) (Cochran, J., concurring); *see also id.* (such cumulative error occurs when "multiple errors … synergistically achieve the critical mass necessary to cast a shadow upon the integrity of the verdict"). Viewed as a whole, the cumulative effect of the prosecution's gender-based argument for death suffused the proceedings with fundamental unfairness. Absent its unrelenting invocation of impermissible gender stereotypes, the state's entire case for death crumbles. Just as in *Buck v. Davis*, "the people of Texas lack an interest in enforcing a capital sentence obtained on so flawed a basis." 137 S. Ct. at 779. In light of the fundamental unfairness of the penalty phase proceedings, which amount to a violation of due process and equal protection principles, together with

the affront to Ms. Lucio's individual dignity effected by those proceedings, the jury's illegitimate verdict of death cannot be permitted to stand.

IX. CLAIM 9: MS. LUCIO IS INNOCENT OF THE DEATH PENALTY

All allegations and arguments presented in the Introduction and other Claims are fully incorporated into this Claim by this specific reference.

A. Introduction

Ms. Lucio had no history of violence and no criminal record—apart from a sole conviction for driving under the influence—at the time of her capital murder trial. No one had ever accused her of violence or cruelty. As a result, the prosecution could point to nothing in her life that would support an affirmative finding to the principal question before the jury at the penalty phase: namely, whether there was a "probability" that Ms. Lucio would commit criminal acts of violence that would constitute a continuing threat to society" if sentenced to life without the possibility of parole. Tex. Code Crim. Proc. 37.071, § 2 (b)(1). Unlike many capital murder cases, the prosecution also lacked psychiatric expert testimony

that Ms. Lucio would pose a future danger if incarcerated. By any measure, the prosecution's evidence in support of the "future dangerousness" special issue was flimsy.

To prove that Ms. Lucio deserved to die, the prosecution therefore resorted to a grab-bag of half-truths and a regurgitation of the medical examiner's flawed testimony at the culpability phase of trial. As described below, their star witness was a so-called "expert" on prison violence whose false testimony has led this Court to vacate two capital murder sentences. 37 RR 11-38. They introduced jail records purporting to show Ms. Lucio's tendency to misbehave, disobey rules, and start fights in jail—but Ms. Lucio was absolved of all wrongdoing in the sole offense that involved physical violence,[87] and the others were considered minor incidents. *See* 41 RR 62-130. Apparently seeking to demonstrate Ms. Lucio's lack of remorse, prosecutors also introduced a jail log from the day she was convicted of capital murder, showing that she failed to cry or scream. 41 RR 62.

[87] *See* 41 RR 83, 86 (indicating that after investigation, officers concluded "inmate was not involved").

When the defense introduced expert testimony from a social worker and psychologist who attested to Ms. Lucio's history of child sexual abuse and domestic violence, the prosecution sought to portray her as a liar who had fabricated accounts of rape and assault to sway the jury. *See, e.g.,* 37 RR at 227-28; 38 RR at 33-34, 111. In so doing, the prosecution concealed evidence that verified Ms. Lucio's consistent accounts of the extreme childhood sexual abuse she endured. *See* Ex. 36 at ¶ 7 (Juarez Dec.).

On appeal, Ms. Lucio contended that the evidence was legally and factually insufficient to support an affirmative finding to the future dangerousness special issue. 351 S.W.3d at 902. She pointed out that this Court had previously found evidence of future dangerousness to be insufficient in a case involving a mother who killed one infant and tried to kill another. *Id.* (citing *Berry v. State*, 233 S.W.3d 847 (Tex. Crim. App. 2007)). The Court rejected her claim, relying in part on the State's mischaracterization of Ms. Lucio's jail records to distinguish Ms. Lucio's case from *Berry*. 351 S.W.3d at 904.

New evidence and law, much of it previously unavailable, now conclusively demonstrates that the prosecution's case for death was based

on false and misleading evidence and impermissible gender stereotypes. As described below, this new evidence and law satisfies the gateway requirement of § 5(a)(3), and gives rise to several constitutional violations.

B. Legal Standard Under § 5(a)(3)

Texas's capital habeas statute allows for merits consideration of a subsequent writ under certain circumstances. *See* Article 11.071, § 5(a). Section 5(a)(3) of art. 11.071 states: "If a subsequent application for a writ of habeas corpus is filed after filing an initial application, a court may not consider the merits of or grant relief based on the subsequent application unless the application contains sufficient specific facts establishing that: (3) by clear and convincing evidence, but for a violation of the United States Constitution no rational juror would have answered in the state's favor one or more of the special issues that were submitted to the jury in the applicant's trial under Article 37.071, 37.0711, or 37.072."

At this stage, Ms. Lucio is not required to "actually *convince*" the Court by clear and convincing evidence of her innocence. *Ex parte Blue*, 230 S.W.3d 151, 162-63 (Tex. Crim. App. 2007). Rather, § 5(a)(3) requires merely "a threshold showing of evidence that would be at least sufficient to support an ultimate conclusion, by clear and convincing evidence." *Id*.

at 163. Thus, if Ms. Lucio makes "a threshold presentation of evidence that, if true, would be sufficient to show by clear and convincing evidence that no rational factfinder would [have answered one or more of the special issues in the State's favor, she] will be allowed to proceed to the merits of [her] claim[s] in a subsequent writ application." *Id*.

This Court has also stated that "prior evidence and findings are relevant to a determination of whether applicant's current pleading meets the requirements of Article 11.071, § 5(a)(3), as construed in *Blue*." *Ex parte Woods*, 296 S.W.3d 587, 606 (Tex. Crim. App. 2009) (*citing Ex parte Blue*, 230 S.W.3d 151, 154 (Tex.Cr.App.2007)). The Court has advised that, "[s]omeone in applicant's position should, therefore, include in any successive habeas corpus application a complete discussion of the history of the case, including the prior evidence and findings." *Id*. at n.30.

Like § 5(a)(2), once Ms. Lucio passes through the "gateway" of § 5(a)(3), the Court may review the merits of previously rejected claims. This Court has held that when the Legislature enacted Article 11.071, § 5(a)(3) it intended to codify the "innocence of the death penalty" doctrine found in *Sawyer v. Whitley*, 505 U.S. 333 (1992). *Blue*, 230 S.W.3d

at 160 ("Section 5(a)(3) of Article 11.071 represents the Legislature's attempt to codify something very much like this federal doctrine of 'actual innocence of the death penalty' for purposes of subsequent state writs."). Typically, a federal court cannot entertain the merits of a state prisoner's habeas claim if the claim is procedurally defaulted except for two exceptions: if the prisoner can show cause and prejudice for the default, *see Wainwright v. Sykes*, 433 U.S. 72, 87 (1977), or if the prisoner can demonstrate that the federal court's failure to review the claim would cause a fundamental miscarriage of justice, *see Murray v. Carrier*, 477 U.S. 478, 495-96 (1986).

The federal standard in *Sawyer* permits a state prisoner to meet the fundamental miscarriage of justice exception if he can establish clear and convincing evidence he is "actually innocent of the death penalty." *Sawyer*, 505 U.S. at 350. The Legislature incorporated into § 5(a)(3) both of the *Sawyer* definitions of "actual innocence of the death penalty," *see Blue*, 230 S.W.3d at 159 ("The Legislature quite obviously intended [§ 5(a)(3)], at least in some measure, to mimic the federal doctrine of 'fundamental miscarriage of justice.'"); and the *Sawyer* clear-and-convincing standard of proof for such a claim. *See Ex parte White*, 506 S.W.3d 39,

48–49 (Tex. Crim. App. 2016) ("In Article 11.071, the legislature modeled an exception to the subsequent-application prohibition on the federal standard, incorporating the 'clear and convincing evidence' burden of proof for whether 'no rational juror would have answered in the state's favor one or more of the special issues.'").

C. The Prosecution's Penalty Phase Case Rested On False And Misleading Testimony

1. Penalty phase witness A.P. Merillat testified falsely and misled the jury regarding the likelihood that Ms. Lucio would commit future acts of violence

The State's star witness at the penalty phase was A.P. Merillat, who relied on misleading claims about inmate security classifications and inaccurate statistics to convince the jury that Ms. Lucio would commit future acts of violence even if she were sentenced to life imprisonment. In two other capital cases, this Court has found that Merillat's false testimony was so damaging that it mandated a new sentencing hearing. *Velez v. State*, No. AP-76,051, 2012 WL 2130890, at *32 (Tex. Crim. App. June 13, 2012) (unpublished); *Estrada v. State*, 313 S.W.3d 274 (Tex. Crim. App. 2010). It should reach the same result here. *See Johnson v. Mississippi*, 486 U.S. 578, 590 (1988) (death sentence based on "materially inaccurate" evidence violates Eighth Amendment).

Merillat sought to persuade the jury that the State prison system's security for non-death sentenced inmates was so lax that Ms. Lucio would inevitably be a danger to others in prison if she received a life sentence without parole. Merillat painted a grim picture of unchecked violence in Texas prisons—prison escapes, sexual assaults, and inmate murders—allegedly drawn from unverifiable anecdotes from his time in the State's Special Prosecution Unit. *See* 37 RR 19-20 ("We're working a case now where a convicted murder killed her cell mate last year."); 37 RR 19 (claiming there were precisely 20,000 assaults by inmates in Texas prisons in 2007); 37 RR 23 (noting multiple prosecutions of female prisoners for assault and weapons possession). As in *Velez*, Merillat misrepresented the prison classification of inmates sentenced to life without parole for capital murder, incorrectly claiming that their access within the prison was essentially unrestricted. 37 RR 18-19. *See Velez,* 2012 WL 2130890, at *31. Merillat's "danger by implication" testimony was critical to the State, which otherwise lacked any evidence that Ms. Lucio posed a future danger to anyone at all. As he has done in other cases, Merillat testified to inflated and unverifiable estimates of violence and opportunities for Ms. Lucio to commit future acts of violence. Further,

his purported expert testimony failed to account for the lower rates of violence, escapes, and homicides in the female prison population.

In *Velez,* this Court found that Merillat's testimony was prejudicial, noting that the defendant's criminal record was insignificant and that the state had failed to present psychiatric testimony demonstrating that the defendant was a future danger. *Velez,* 2012 WL 2130890, at *33. In the case of Ms. Lucio, the harm created by Merillat's misleading testimony was even greater: unlike the defendant in *Velez*, who had several criminal convictions, including a crime of violence, Ms. Lucio had only one non-violent DWI conviction. The prosecution proffered no expert testimony that she would be a danger in the future. Given the absence of any evidence of future dangerousness, it is impossible to conclude that Merillat's testimony "did not contribute to the conviction or punishment." *Id.*

a. *Merillat misrepresented Ms. Lucio's prison classification level and her eligibility for furlough if sentenced to life without parole*

Merillat misstated the prison classification of inmates sentenced to life without parole for capital murder. As in *Velez* and *Estrada,* Merillat described the "G" classification system and how it places restrictions on

inmates' privileges, movements, and visitation rights within the prison system. Merillat made clear that Ms. Lucio was not eligible for G1 status because someone convicted of capital murder with "life without parole…can never achieve that status. So that doesn't apply here." 37 RR 25. He then went on to describe the privileges afforded to G-2 inmates. *Id.* Later, when describing levels of inmate segregation in housing, he again described G-2 restrictions down through a 5-A restriction. 37 RR 26. The implication, of course, was that Ms. Lucio could have achieved G-2 status if sentenced to life without parole.

This testimony created a materially false impression of the prison classification system. In 2005, two years before Ms. Lucio's trial, TDCJ had changed its classification scheme. Under the new regulations in effect at the time of Merillat's testimony, life without parole prisoners were *never* classified to a custody less restrictive than G-3. *Estrada*, 313 S.W.3d at 287 (taking judicial notice of the TDCJ's policy change); Ex. 41 at 2 (2005 TDCJ Guidelines) ("Effective 9/1/05, offenders convicted of Capital Murder and sentenced to 'life without parole' will not be classified to a custody less restrictive than G3 throughout their incarceration.").

Merillat implied that Ms. Lucio's G-3 access in the prison system would be unrestricted and akin to others convicted of lesser offenses: "A convicted capital murderer will not be treated more specially, for lack of a better term, than a burglar, a forger, a robber or drug dealer with that same number of year sentence… They can work, if they choose to, go to school, go to visitation, go to church, go to medical, go to the library, walk to and from their cells without escort, without handcuffs." 37 RR 18-25. While it's true that someone convicted of burglary for 50 years would be classified at a G-3 for the first ten years of their imprisonment, after that, they could achieve a lesser classification of G-2. Ex. 41 at 4 (2005 TDCJ Guidelines). That could never happen in Ms. Lucio's case. *Id.* at 2. In order to convince the jury that Ms. Lucio was a future danger, Merillat completely misled them about her privileges within the prison system.

Similarly, Merillat falsely implied to the jurors that Ms. Lucio would be eligible for furlough. When asked if there were furlough procedures within the prison system, he said: "Yes, sir. Even a convicted capital murderer can be considered for furlough." 37 RR 22. This was false. In Texas, only those sentenced to life *with* parole are eligible for furlough. *See* Ex. 42 (TDCJ AD04.56 Form) (factor for granting furlough is parole

date eligibility within six months). Ms. Lucio could only have been sentenced to life without parole, and she would therefore never be eligible for furlough. *See* Tex. Code Crim. Proc. 37.071.

These are not isolated mistakes—instead, it's more of the same false testimony Merillat offered about the classification system in *Estrada* and *Velez*. In *Estrada*, the court concluded that there was a "a fair probability that appellant's death sentence was based upon Merillat's incorrect testimony," which included falsely claiming that over time, the defendant could achieve a significantly lower (and less restrictive) security classification. *Estrada*, 313 S.W.3d at 287. In *Velez*, the court similarly concluded that the State and Merillat "knew or should have known that Merillat's testimony about the G classification of inmates who were sentenced to life without parole was false" and was material. *Velez*, 2012 WL 2130890, at *32. Merillat offered substantially similar—and similarly flawed—testimony here.

b. *Merillat obfuscated statistics showing that female prisoners are less violent than male prisoners, creating a materially false impression that Ms. Lucio would commit future acts of violence*

Moreover, Merillat made no effort to distinguish female from male prisoners, even though a 2007 study showed that female convicted murderers in Texas had committed no serious assaults or homicides.[88] Ex. 40 at ¶ 13 (Reidy Dec.). Indeed, he sought to imply that female prisoners were just as violent as men and that Ms. Lucio would have the opportunity to harm other prisoners, prison guards, and visitors. 37 RR 22-23. This is belied by the research both nationally and in Texas, which shows that incarcerate women have much lower rates of serious crimes of violence. In 2008, for example, TDCJ data showed that "[w]hile males were cited for 9 acts of completed escapes, 7 homicides, 770 riots and 933 felonies, females did not receive any violations for those severe acts." Ex. 40 at ¶ 26 (Reidy Dec.).

[88] Regardless, being convicted of capital murder is not predictive of prison violence. Ex. 40 at ¶ 27 (Reidy Dec.). Multiple group statistical studies indicate that most individuals convicted of capital murder were not cited for violent misconduct in prison. *Id.* This includes inmates serving life without parole sentences. *Id.*

And even without disaggregating the data by gender—Merillat's numbers were exaggerated. Merillat claimed that in 2007 there were 20,000 assaults of all types by inmates on other inmates or staff, and nine prison homicides within the Texas prison system. 37 RR 19-20. A Department of Justice report describing prison homicides in federal and state prisons reported that prison homicides occurred at a rate of 3-4 per 100,000 state prisoners between 2001 and 2008—a much lower rate than Merillat described. *See* Ex. 40 at ¶ 13 (Reidy Dec.).

Merillat's testimony significantly misled the jury in its deliberations. *See id.* at ¶ 12. This is because "erroneous predictions of future violence by an expert that are based on anecdotes or inadequate or misleading information and offered with great assurance may sway juror decision-making even in the absence of scientific evidence to support such assertions." *Id.* at ¶ 12. Like in *Velez*, the State here, for example, highlighted Merillat's qualifications as a fingerprint expert, a blood stain interpretation expert, a child sex crimes expert, and a published author. 37 RR 13, 24; *Velez*, 2012 WL 2130890, at *32. Merillat's extensive credentials "increased [Merillat's] credibility as a person knowledgeable about violence in prisons and future dangerousness" to the jury. *Id.* But

when "expert predications or mere implications of future violence risk by capital offenders based on subjective or flawed influences are empirically tested, the results have consistently revealed high error rates among capital jurors." Ex. 40 at ¶ 16 (Reidy Dec.). His biased testimony swayed the jury to erroneously assume Ms. Lucio would involve herself in prison violence if sentenced to life without parole. *See id*.

2. Prosecutors presented false evidence when they characterized Ms. Lucio's jail records as providing evidence of assaultive behavior

As noted above, prosecutors relied heavily on Ms. Lucio's purported record of disciplinary infractions while she was at the county jail to argue that she would commit future acts of violence if sentenced to life imprisonment. After introducing the records in their case in chief, 44 RR 62-130, prosecutors referred to them frequently during their cross examination of defense witnesses and in closing argument. For example, prosecutor Padilla challenged Ms. Villanueva's testimony by drawing her attention to what he characterized as jail "disciplinary" reports. 38 RR 14-18. He falsely stated that Ms. Lucio had been involved in in a fight and inciting "riotous behavior," *id.* at 15, and that she had assaulted another

inmate. *Id.* at 18. Then, in closing argument, the prosecution urged the jury to:

> look at her jail record because this jail record speaks to you about the type of person that she is. And in the short time that she's been in jail she has had physical altercations, verbal altercations, been in possession of contraband, unauthorized communication, inciting a riot, and confrontational towards the staff. What does that tell you about the type of person that she is now?

38 RR 145. The Texas Court of Criminal Appeals later relied on this mischaracterization to find that there was sufficient evidence to support the jury's affirmative finding to the second special issue; namely, that Ms. Lucio would likely commit future acts of violence if sentenced to life imprisonment without the possibility of parole. *Lucio v. State*, 351 S.W. 3d 878, 904 (2011).

Yet the prosecution's characterization of Ms. Lucio's jail records was patently false. Included with this application is a declaration from Chandra Bozelko, who has analyzed the jail records. Ex. 43 (Bozelko Dec.). As Ms. Bozelko demonstrates, Ms. Lucio was cleared of any involvement in the jail fight. *Id.* at 2-3. The notes on the incident indicate that Ms. Lucio was actually trying to stop someone from being injured by blocking blows. 41 RR Ex. 42. Ms. Lucio had *no record of violence* in the

jail. Indeed, none of the alleged rule infractions noted on Ms. Lucio's jail records were processed as disciplinary infractions. Ex. 43 at 3 (Bozelko Dec.). The incident where she allegedly disrespected a guard arose because Ms. Lucio was, according to the guard, using too much cleaning fluid to clean her jail cell. *Id.* at 2. This incident was not written up as a rule violation. The only rule infractions involving Ms. Lucio did not result in disciplinary action. The only misbehavior she even potentially engaged in involved writing notes to another inmate, raising her voice with other inmates, and possibly having access to tattoo paraphernalia.

3. The special issue of future dangerousness is unconstitutionally vague

When a criminal sentence is based on a statutory standard for risk assessment that is "hopelessly indeterminate by being too abstract[,]" "the application of [that] 'qualitative standard' of risk assessment" violates the Due Process Clause of the Fourteenth Amendment. *State v. Doyal*, 589 S.W.3d 136, 147 (Tex. Crim. App. 2019) (quoting *Johnson v. United States*, 576 U.S. 591, 604 (2015). The future-dangerousness special issue ("FDSI"), Tex. Code Crim. Proc. art. 37.071, § 2(b)(1), is void for vagueness under the standard articulated in *Johnson* and accepted by this Court in *Doyal*. FDSI also fails under the more stringent Eighth

Amendment requirement that a State "must channel the sentencer's discretion by 'clear and objective standards' that provide 'specific and detailed guidance,' and that 'make rationally reviewable the process for imposing a sentence of death.'" *Godfrey v. Georgia*, 446 U.S. 420, 428 (1980).[89]

A Texas court can impose a death sentence only if the jury unanimously finds that "there is *a probability* that the defendant would commit *criminal acts of violence* that would constitute a *continuing* threat to *society*." Tex. Code Crim. Proc. art. 37.071 § 2(b)(1) (emphases added).[90] Neither the statute nor the court's charge to the jury defines the statute's terms; jurors may define for themselves what the "a probability" means, what constitutes a "criminal act[] of violence," what a "continuing threat is" and for how long it must continue, and what "society" means. To be sentenced under a law "so standardless that it invites arbitrary enforcement" violates due process, *Johnson*, 576 U.S. at 595, because it is akin

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[89] Quoting, respectively, *Gregg v. Georgia*, 428 U.S. 153, 198 (1976); *Proffitt v. Florida*, 428 U.S. 242, 253 (1976) (op. Stewart, Powell, and Stevens, JJ.); and, *Woodson v. North Carolina*, 428 U.S. 280, 303 (1976) (op. Stewart, Powell, and Stevens, JJ).

[90] Because the finding is necessary for a death sentence, for constitutional purposes, it is an element of death-eligible murder. *See Ring v. Arizona*, 536 U.S. 584, 602-09 (2002).

to being sentenced under no law at all. *United States v. Davis*, 139 S. Ct. 2319, 2323 (2019).

a. *The vagueness standard under Johnson*

In 2015, four years after Ms. Lucio's application was filed under Tex. Code Crim. Proc. article 11.071, § 4, the U.S. Supreme Court announced a new test for determining whether a criminal statute is unconstitutionally vague. Writing for the Court, Justice Scalia stated the well-established due-process principle that a statute is unconstitutional when it "denies fair notice to defendants and invites arbitrary enforcement." *Johnson*, 576 U.S. at 597. He then described a two-prong test that determines whether vagueness violates due process. *Id.* First, a statute cannot require the factfinder to assess the hypothetical risk of violence posed by idealized conduct in the abstract. *Id.* The question at this first stage, the measurement prong, is "How to measure the risk of violence?" Second, a sentencing statute cannot leave uncertainty about the threshold level of risk of violence required for the finding. *Id.* at 598. The question at the second stage is "What is the threshold for the finding of the risk of violence?" If a statute combines these two defects—indeterminacy about how to measure risk and indeterminacy about how much risk, it takes to

cross the threshold for culpability—then it "produces more unpredictability and arbitrariness than the Due Process Clause tolerates." *Id*.

The statutes the Supreme Court and this Court have invalidated under *Johnson* all made the defendant eligible for a higher penalty upon finding that conduct he engaged in, in the abstract, was associated with a potential risk of violence.[91] FDSI does just that. Texas Code of Criminal Procedure Article 37.071 provides that a predicate finding for a death sentence is "whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society." Tex. Code Crim. Proc. art. 37.071, § 2(b)(1) (2013). The Code does not provide specific definitions for the special issue's terms, and this Court has consistently declined to construe them, instead holding that a jury can interpret them according to their common-usage meaning. *See*,

[91] *Johnson*, 576 U.S. at 597 (statute defining conviction that "involves conduct that presents a serious potential risk of physical injury to another"); *Sessions v. Dimaya*, 138 S. Ct. 1204, 1215-16 (2008) (statute defining "crime of violence" as crime "that, by its nature, involves a substantial risk that physical force against the person or property of another may be used in the course of committing the offense"); *Davis*, 139 S. Ct. at 2336 (any felony "that by its nature, involves a substantial risk that physical force against the person or property of another may be used in the course of committing the offense"); *Doyal*, 589 S.W.3d at 139 (examining the "catch-all" provision of the Texas Open Meetings Act that made specific meetings between government officials a crime).

e.g., *Saldano v. State*, 232 S.W.3d 77, 91 (Tex. Crim. App. 2007), *Ladd v. State*, 3 S.W.3d 547, 572–73 (Tex. Crim. App. 1999), *King v. State*, 553 S.W.2d 105, 107-08 (Tex. Crim. App. 1977). Each juror may define for herself or himself the terms' definitions, and then make a finding of a probability of an abstract act of violence occurring sometime in the projected course of the defendant's future, unmoored from real-world facts or statutory elements. That speculative inquiry then becomes a necessary finding for imposing a death sentence. As demonstrated by inconsistent jury verdicts in Texas's capital cases, the Texas death-sentencing procedure's lack of a "principled and objective standard . . . confirm[s] its hopeless indeterminacy." *Johnson*, 576 U.S. at 598.

b. *FDSI fails Johnson's measurement prong*

The FDSI fails the *Johnson* test's measurement prong because it leaves "grave uncertainty" about how to estimate the probability of a defendant's future dangerousness. *Johnson*, 576 U.S. at 592. Just as the residual clause tied "the judicial assessment of risk to a judicially imagined 'ordinary case' of a crime," the future-dangerousness special issue forces a juror to imagine a hypothetical future act and assess "whether that abstraction presents a serious risk of physical injury." *Id*. at 596-97.

The future-dangerousness special issue is even more nebulous because it leaves a juror to imagine not only the abstraction but also to set the parameters that define "criminal acts of violence."

The residual clause in *Johnson* failed the measurement test because it required that judges evaluate "an idealized ordinary case of the crime." *Id*. at 604. Under the Texas scheme, a juror, unequipped with the legal training and sophistication of a judge, must conceive of an act, any act, that could occur in the lifetime of the defendant and then evaluate whether that act would constitute a "criminal act of violence" that could theoretically threaten any group of people the juror deems to comprise "society," which could, at the juror's discretion, be limited to the "society" within a penal institution. *See Rougeau v. State*, 738 S.W.2d 651, 660 (Tex. Crim. App. 1987) ("It is obvious to us that in deciding whether to answer the second special issue in the negative the jury would clearly focus its attention on the 'society' that would exist for the defendant and *that* 'society' would be the 'society' that is within the Department of Corrections."), *overruled on other grounds by Harris v. State*, 784 S.W.2d 5 (Tex. Crim. App. 1989).

The Texas inquiry precisely recreates the "hopeless indeterminacy" of the residual clause in *Johnson*; there is no "principled and objective standard" to apply, and thus a juror must "resort to a different ad hoc test to guide" the inquiry. *Johnson*, 576 U.S. at 598. This Court has held that the future-dangerousness special issue is not vague because jurors are appropriately guided by relying on the terms' common-usage meaning. However, this is no guarantee that every juror defines the terms' common usage the same way—as noted by the Supreme Court in *Johnson*, "common sense is a much less useful criterion than it sounds." *Id.* at 599.

Of the residual clause, the Supreme Court in *Johnson* asked, "[h]ow does one go about deciding what kind of conduct the 'ordinary case' of a crime involves? 'A statistical analysis of the state reporter? A survey? Expert evidence? Google? Gut instinct?'" *Id.* at 597 (quoting *United States v. Mayer*, 560 F.3d 948, 952 (9th Cir. 2009) (Kozinski, C.J., dissenting from denial of reh'g en banc)). The future-dangerousness special issue demands that jurors engage in the same speculation, and thus fails to prevent the inquiry from "devolving into guesswork and intuition." *Id.* at 600. Because the special issue leaves "grave uncertainty" about how

to estimate the probability of the defendant's future dangerousness, the Texas death-sentencing procedure fails the *Johnson* measurement test and violates the due process guaranteed by the Fourteenth Amendment.

c. *FDSI fails Johnson's threshold risk prong*

The FDSI likewise fails the second prong of the *Johnson* test since there can be no question that no determinate threshold exists for a finding of future danger. The Texas legislature intentionally left open the question "what probability?" when it used the *indefinite* article and no adjective. This Court's own cases establish the indeterminacy of the threshold. As one federal court explained, this Court has at times said "a probability" within the context of future dangerousness means "more than a bare chance," "more than a possibility," "something between potential and more likely than not," and "more likely than not." *Hernandez v. Davis*, 2017 WL 2271495, at *25 (*citing Smith v. State*, 779 S.W.2d 417, 421 (Tex. Crim. App. 1989); *Hughes v. State*, 878 S.W.2d 142, 148 (Tex. Crim. App. 1992); *Cuevas v. State*, 742 S.W.2d 331, 346-47 (Tex. Crim. App. 1987), *overruled on other grounds in Hughes*, 878 S.W.2d at 142; *Robison v. State*, 888 S.W.2d 473, 481 (Tex. Crim. App. 1994)).

Given this intentional lack of guidance as to the threshold level of risk required to support a finding of future danger, the jury is left to determine whether there is a nebulous level of "probability" of whether a jury-imagined "criminal act of violence" will constitute an equally indeterminate "continuing threat to society." This parallels the residual clause's requirement that the judge applies a serious potential risk standard to a "judge-imagined abstraction," which the Court found directly contributed to the unconstitutional vagueness of the statute. *Johnson*, 576 U.S. at 598. But because judges have extensive training and experience in defining and recognizing well-founded legal abstractions, and jurors have no such training or experience, the future dangerousness special issue is more indeterminate and therefore more constitutionally infirm than the invalidated residual clauses.

The prejudicial effect of the vague statute was magnified in Ms. Lucio's case by the paucity of evidence supporting an affirmative answer to the future danger special issue. Because the statute fails to adequately inform juries what they must find to impose the death penalty and frees them to rely on nearly anything, Ms. Lucio's sentence must be vacated.

d. *Ms. Lucio's case exemplifies the problem*

Ms. Lucio's case illustrates the arbitrary nature of FDSI. In *Berry v. State*, 233 S.W.3d 847 (Tex. Crim. App. 2007), a mother was convicted of capital murder for the death of her son. 233 S.W.3d at 850. Berry argued that her "defense experts established she 'had been a threat only to two of her own children, a threat which [would be] virtually eliminated by a sentence of life imprisonment throughout her child-bearing years.'" *Berry*, 233 S.W.3d at 862. Ms. Lucio likewise argued there was insufficient evidence "to support the jury's affirmative answer to the future-dangerousness special issue because this evidence shows that she is dangerous only to her own children, which appellant would not have access to if she was sentenced to life without parole and spent the rest of her life in prison." *Lucio v. State*, 351 S.W.3d 878, 902 (Tex. Crim. App. 2011). Despite the similarities, this Court held that there was *insufficient* evidence to support a finding that Berry posed a future danger, *Berry*, 233 S.W.3d at 864, but that in Ms. Lucio's case, "the evidence [was] legally sufficient to support the jury's affirmative answer to the future-dangerousness special issue." *Lucio*, 351 S.W.3d at 905. Concurring in *Lucio,*

Judge Keller remarked that "[i]n some ways, Berry's crime was more heinous, and her criminal history worse, than [Lucio]'s." 351 S.W.3d at 911 (Keller, J., concurring). If even this Court cannot fully agree on the definition of future danger under FDSI, it is not clear how juries can be trusted to do so.

The inconsistencies in sentencing resulting from FDSI are not limited to these two cases. *Compare*, *e.g.*, *Beltran v. State*, 728 S.W.2d 382 (Tex. Crim. App. 1987) (finding insufficient evidence of future danger based on the fact it was a murder committed during a robbery, past DWI convictions, unadjudicated offenses including three burglaries and aggravated assault on a peace officer, and the defendant's bad reputation), *with Cockrum v. State*, 758 S.W.2d 577 (Tex. Crim. App. 1988) (finding sufficient evidence of future danger based on the fact it was a murder committed during a robbery, the defendant's bad reputation, past convictions for burglary and possession of marijuana, hiding evidence, and attempts to evade police).

The inconsistent sentences resulting from the ambiguity of FDSI evidence of the statute's failure to protect the due process rights of defendants.[92]

D. But For The Constitutional Errors That Infected Ms. Lucio's Trial, No Rational Juror Would Have Condemned Her To Die

1. The State failed to present constitutionally sound evidence of future dangerousness

As the discussion above makes clear, the State's principal penalty phase evidence against Ms. Lucio cannot withstand scrutiny. The credibility of each witness and document has been undermined by new evidence presented in this application. Expert declarations have demonstrated that the testimonies of Dr. Farley and Mr. Merillat were plainly

[92] On direct appeal, Ms. Lucio argued that the evidence was legally insufficient to support an affirmative finding to the FDSI. *Lucio*, 351 S.W.3d at 902. This is the first time she has also argued that the FDSI is unconstitutionally vague. Of course, *Johnson* and its progeny had not been decided prior to Ms. Lucio's appeal and initial habeas application. *Johnson* "announced a substantive rule that has retroactive effect in cases on collateral review." *Welch v. United States*, 136 S. Ct. 1257, 1268 (2016). "[W]hen a new substantive rule of constitutional law controls the outcome of a case, the Constitution requires state collateral review courts to give retroactive effect to that rule." *Montgomery v. Louisiana*, 577 U.S. 190, 200 (2016). Because *Johnson* is new law that was not available at the time Ms. Lucio filed her initial writ, this claim satisfies the requirements of Tex. Code Crim. Proc. article 11.071, § 5(a)(1).

false and misleading. The credibility of June Thompson, whose testimony was hardly pivotal to begin with, has been undermined by the affidavit of her former partner, Jose Guerrero. *See* Ex. 35 (Guerrero Dec.).

After subtracting the tainted, constitutionally unsound evidence, the only remaining basis for the jury's death sentence is the story of a woman living in desperate poverty, trapped in a violent relationship with an abusive partner, who was struggling with substance abuse and untreated mental illness. To be sure, prosecutors sought to use this against Ms. Lucio throughout their closing argument, casting her as someone who would stop at nothing to chase her addiction, whose character was so undesirable that she should be cast out of society. 38 RR 166, 172. Yet substance abuse and its consequences do not justify a death sentence. The State's arguments were calculated to prejudice the jury, and do not amount to evidence of future dangerousness. The weakness of the state's case for death is underscored by the declarations of several jurors who state that they did not believe Ms. Lucio was dangerous at all. *See* Ex. 49 at 2 (Cruz Dec.); Ex. 56 at 2 (Saldivar Dec.).

2. But for ineffective assistance of trial counsel, jurors would have found sufficient mitigating circumstances to warrant a life sentence

With this application, Ms. Lucio has included declarations from two psychologists whose assessments reveal the depth of Ms. Lucio's extreme sexual abuse, domestic violence, trauma, and cognitive impairments. Because trial counsel failed to timely retain a mitigation specialist and essential expert assistance, this evidence was never presented to the jury who condemned Ms. Lucio to die.

The trial court appointed Mr. Gilman to represent Ms. Lucio on May 31, 2007. 1 CR 14. Mr. Gilman did not identify or request any defense experts for nearly six months following his appointment. 9 RR 6. The case was initially supposed to go to trial on February 4, 2008. 10 RR 3-4. The trial court scheduled several status hearings where the judge expressed concerns over Mr. Gilman's lack of trial preparation. 9 RR 5. Seeming to grow increasingly alarmed, the court ordered Mr. Gilman to provide a report of required defense experts by November 30, 2007, only months before the scheduled trial. *Id.* at 5-6. At that time, Mr. Gilman

finally requested the appointment of a mitigation expert, Norma Villanueva, and a psychologist, Dr. John Pinkerman. The court granted his request on December 10, 2007. 10 RR 3.

On January 30, 2008, only five days before trial, Mr. Gilman notified the court that he would not be prepared for the February trial date. When the State complained that he had failed to provide notice of his experts twenty days before trial or provide the substance of their testimony as prescribed by the rules of procedure, he also admitted that they had just met Ms. Lucio for the first time on January 21, 2008. 10 RR 4–6.[93] Mr. Gilman informed the court that the defense experts would need until June to adequately prepare. *Id.* at 3. The court grudgingly rescheduled the trial for May 28, 2008, reminding Mr. Gilman that Ms. Lucio had already been in jail for almost a year and stating that it was, in his opinion, "obscene for a defendant to wait that much for trial." *Id.* at 5.

Although the court granted the defense approximately four more months to prepare, there was not enough time for Ms. Villanueva and Dr.

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[93] Mr. Gilman stated: "The State has the right to talk to our experts after we've designated them. But we haven't even designated them yet. I don't even have a report. They just met [Ms. Lucio] for the first time last week on Monday, on a holiday, at the jail." Mr. Gilman was referring to President's Day, which in 2008 was celebrated on Monday, January 21.

Pinkerman to build rapport with Ms. Lucio and her family members and conduct a comprehensive investigation. As of May 27, 2008—*one day* before the start of the trial—Ms. Villanueva had only met with Ms. Lucio one time. 13 RR 10–11. She only met with one or two members of Ms. Lucio's family. 35 RR 128.

Ms. Villanueva's inability to conduct a comprehensive mitigation investigation harmed her credibility when she testified at the penalty phase about Ms. Lucio's history of gender-based violence. At trial, the prosecution repeatedly challenged Ms. Villanueva's failure to interview critical witnesses, implying that she had conducted a piecemeal investigation. 37 RR 228. The prosecution even attacked her for failing to interview Ms. Lucio's abusers to corroborate her history of abuse. *Id.* at 228–29. In this way, the prosecution suggested that Ms. Villanueva's characterization of Ms. Lucio as a battered woman and trauma survivor was unreliable.

Mr. Gilman's failure to seek the prompt appointment of a mitigation specialist and necessary experts fell below minimally adequate

standards of representation.[94] As a result of his failure to prepare for trial, Mr. Gilman neglected to present substantial mitigating evidence that would have garnered sympathy for Ms. Lucio before the jury. For example, he failed to present readily available evidence of the violent and abusive relationships that Ms. Lucio endured with her two intimate partners. He also failed to present evidence of the violence Ms. Lucio had endured in her childhood home. Although Ms. Villanueva testified that Ms. Lucio had been sexually abused by one of her mother's partners for the span of two years, she was not asked about an uncle, who had also repeatedly raped Ms. Lucio when she was nine years old. Nor was she asked about the stranger who had raped Ms. Lucio in a utility closet when she was still a child.

[94] The ABA Guidelines for the Appointment and Performance of Defense Counsel in Death Penalty Cases make clear that investigation and planning for trial must begin immediately upon counsel's appointment, including promptly obtaining the assistance of a mitigation specialist and all relevant experts to the case. Guidelines for the Appointment and Performance of Def. Couns. in Death Penalty Cases, 1.1 cmt. (Am. Bar Ass'n, rev. ed. 2003). ABA Guideline 10.11 reiterates counsel's duty to investigate issues bearing upon penalty and seek information that supports mitigation or rebut the prosecution's case in aggravation. *Id.* at 10.11.A.

These omissions—attributable to Mr. Gilman's failure to adequately prepare for trial and the limited time Ms. Villanueva had to conduct her mitigation investigation—cannot be dismissed as inconsequential. Central to Ms. Lucio's defense at the penalty phase was testimony about the effects of trauma on her life. Yet the defense utterly failed to develop and present a complete history of the gender-based violence she endured. Without this evidence, the jury could not begin to comprehend the psychological impact of repeated trauma. Moreover, without knowing the full extent of the violence she endured in her intimate partnerships, the jury was given free rein to blame Ms. Lucio for the neglect of her children, absolving her male partners of responsibility.

Indeed, if Mr. Gilman had done his job and had worked to retain a proper mitigation expert, the jury would have heard testimony akin to Dr. Brand's conclusion in her report, garnered after spending hours interviewing Ms. Lucio and reviewing her history of complex trauma: "Melissa's life has been characterized by poverty, extreme and chronic sexual, physical, and emotional abuse as well as neglect in childhood, followed by truly extraordinary levels of almost constant domestic violence

and severe, unrelenting stress in adulthood." Exhibit 14 at 2-3 (Brand Dec.).

CONCLUSION AND PRAYER FOR RELIEF

For the foregoing reasons and those presented in any/all submissions accompanying this application, Ms. Lucio prays:

1. That the Court of Criminal Appeals find that Ms. Lucio's Application complies with Article 11.071, § (5) of the Texas Code of Criminal Procedure;

2. That leave to amend the Application be granted;

3. That summary relief be granted on her claims which are clear from the facts set forth in this pleading and the record;

4. That an evidentiary hearing on the claims and any and all disputed issues of fact be granted;

5. That discovery as may be necessary to a full and fair resolution herein be allowed;

6. That Ms. Lucio's conviction and judgment imposing death be vacated; and

7. If the State disputes any averments of legal issues, Ms. Lucio's execution should be stayed to allow for a hearing and briefing commensurate with the seriousness of the issues.

DATED: April 15, 2022

Respectfully submitted,

/s/ Tivon Schardl

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**Pro Hac Vice Pending*

STATE OF TEXAS §

§

COUNTY OF TRAVIS §

§

VERIFICATION

Before me, the undersigned authority, on this day personally appeared Tivon Schardl, who upon being duly sworn by me testified as follows:

1. I am a member in good standing of the State Bar of Texas.

2. I am the duly authorized attorney having the authority to prepare and verify Ms. Lucio's Application for a Writ of Habeas Corpus Seeking Relief from a Judgment Imposing Death.

3. I have prepared and read the foregoing Application for a Writ of Habeas Corpus, and I believe all allegations in it to be true.

Signed under penalty of perjury:

Tivon Schardl

Signed and sworn to me on this 15th day of April, 2022.

GRETCHEN E. WEBER
Notary Public, State of Texas
Comm. Expires 07-02-2025
Notary ID 133190296

CERTIFICATE OF SERVICE

I hereby certify that on the 15th day of April 2022, a copy of the foregoing application was served upon counsel for the State via efile to:

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