

IN THE
UTAH COURT OF APPEALS

STATE OF UTAH,
Plaintiff and Appellee,
v.
JOHNNY BRICKMAN WALL,
Defendant and Appellant.

BRIEF OF APPELLANT

On appeal from the Third Judicial District Court, Salt Lake County,
Honorable James T. Blanch, District Court No. 131903972

Johnny Wall is incarcerated.

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Oral Argument Requested

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Represented by:

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Parties Below Not Parties to the Appeal

Other party: Pelle Von Schwedler Wall

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Introduction

Uta Von Schwedler was found dead in her bathtub with a treasured photo album floating at her feet. She had drowned. She had a near-fatal dose of Xanax in her system and cuts on her wrist and leg. Bloody handprints on the window sill and sink showed how she had steadied and lowered herself into the tub. Her shirt was dry, neatly folded, and draped over the side of the tub.

The medical examiner believed it could have been a suicide. He certified the manner of death as “could not determine,” a certification he uses when he considers at least two manners of death to be “equally compelling.” (R.13834.)

The State charged Dr. Johnny Wall, Uta’s ex-husband, with murder. But no evidence placed Johnny in the home at the time of Uta’s death, and the evidence fell well short of excluding reasonable doubt that Uta’s death was a suicide.

At trial, the parties drew competing inferences from largely uncontested evidence. The defense argued that Uta killed herself, either intentionally or accidentally. Pills strewn on the closet floor reflected her anxious search for hidden medication, and items knocked over indicated her intoxication as the Xanax took effect. The cuts on her body were in places and at angles consistent with being self-inflicted. And bloody handprints on the sink and windowsill showed that she steadied herself into the tub.

The State had a less likely theory: Johnny killed Uta. This theory had two fatal flaws: (i) no evidence connected Johnny to Uta’s home; and (ii) the inference of suicide was more reasonable than the inference of homicide. The homicide

theory hinged on the fact that Johnny and Uta had, like many divorced couples, a bitter custody dispute. The State's experts struggled to describe how Johnny might have attacked Uta, restrained her, injected her with Xanax, and forced her into the tub. But the State could not explain how Johnny left no physical evidence – not a mark on Uta, or a fingerprint at the scene, or DNA in her home.

Without physical evidence placing Johnny in Uta's home, the State misconstrued four DNA tests results on Uta's fingernails and bedding. Johnny moved to exclude this evidence because it was unreliable and could mislead or confuse the jury. The trial court admitted the evidence but cautioned the State to present the evidence accurately and not to misconstrue the results.

But the State did just that. It misrepresented that Johnny contributed DNA to a stain on Uta's pillowcase, based on a test that could not differentiate between Johnny and his sons *who lived in Uta's home*. Worse, a more informative test on the same sample indicated Johnny's son was the source of the DNA. The State also misrepresented two test results from Uta's pillowcase and comforter as proving that Johnny had been in Uta's bedroom. But the items tested contained the DNA from several people, including Johnny's children, and his children collectively share with Johnny the DNA found on these items. Again, because the children lived with Uta, the presence of their DNA would be expected.

Finally, the State misrepresented that three cells of male DNA under Uta's fingernails came from Johnny even though the lab could reach "no meaningful

conclusion.” The State urged the jury to convict based on this unidentified male DNA: “I would submit to you it was as if Uta was standing in this courtroom and pointing to the defendant as her killer.” (R.10141-42.) The State’s mischaracterizations of the DNA tests were misleading, confusing, and false.

The jury convicted Johnny. Without any evidence placing him at the scene, the conviction is explainable only by the jury’s confusion stemming from the State’s misconstruing the DNA results. The court should have excluded the unreliable DNA evidence, and trial counsel should have objected when the State misconstrued the DNA test results.

Viewed accurately, the evidence falls well short of excluding reasonable doubt. Because the suicide theory is more plausible, the homicide verdict is based on speculation. Under Utah law, a verdict is based on speculation if the evidence supports two equally plausible inferences. Here, the inferences are, at best, equally plausible. This court should vacate the conviction.

Alternatively, the court should order a new trial. “Just as [courts] are more ready to view errors as harmless when confronted with overwhelming evidence of a defendant’s guilt, [courts] are more willing to reverse [or grant a new trial] when a conviction is based on comparatively thin evidence.” *State v. Charles*, 2011 UT App 291, ¶ 37 n. 14, 263 P.3d 469. Where evidence is thin, “almost any error has the potential to be prejudicial.” *Id.* This court should order a new trial.

Statement of the Issues

Issue 1 – Sufficiency of the Evidence: Whether the trial court erred in denying the motion to arrest judgment where the evidence does not exclude reasonable doubt of Johnny’s innocence.

Standard of Review: This court determines whether inferences from circumstantial evidence have “a basis in logic and reasonable human experience sufficient to prove each legal element of the offense beyond a reasonable doubt.” *State v. Workman*, 852 P.2d 981, 985 (Utah 1993). This court reverses where “reasonable minds must have entertained a reasonable doubt that the defendant committed the crime.” *State v. Van Dyke*, 2009 UT App 369, ¶ 19, 223 P.3d 465.

Preservation: This issue was preserved at R.2024-44.

Issue 2 – DNA Evidence: Whether the court violated [rule 702](#) in admitting misleading DNA test results.

Standard of Review: A court’s decision to admit evidence is reviewed for an abuse of discretion. *State v. Lowther*, 2017 UT 34, ¶ 17, 398 P.3d 1032.

Preservation: Defense counsel moved to exclude the evidence at R.766-67,968-69, and the court admitted it at R.1712-19.

Issue 3 – Ineffective Assistance of Counsel: Whether counsel was ineffective for failing to object when the State mischaracterized the DNA results.

Standard of Review/Preservation: Claims for ineffective assistance of counsel present questions of law, *State v. Ott*, 2010 UT 1, ¶ 16, 247 P.3d 344, and need not be preserved. *State v. Johnson*, 2017 UT 76, ¶ 22, 416 P.3d 443.

Statement of the Case

1. Uta Is Found Dead

On the evening of September 27, 2011, Uta's boyfriend arrived at her home and found her dead in her bathtub. (R.6651.) She had drowned. (R.13833.)

Cold water was running in the tub, and a "much loved" photo album floated at her feet. (R.6651-55,9428.) Uta had a near-fatal dose of Xanax in her system. (R.13842.) She had cuts on her wrist and one on her leg. (R.7139.) Her kitchen knife lay under her body in the tub. (R.6890.) She was found around 8 p.m., and no one had heard from her since the night before. (R.6651,13604.)

2. The Evidence Points to Suicide

The evidence suggests a suicide. Uta overdosed on Xanax, cut herself, and then, while intoxicated, lowered herself into the bathtub, and drowned.

The scene – Uta's shirt was "apparently dry," folded, and neatly draped over the side of the tub the same way as other clothing was draped over her rocking chair. (R.9433,9428.) Blood stains on the front of her shirt suggested she had pressed her cut wrist against her chest as a compress. (R.9428,13505-07.)

Uta had intoxicating levels of Xanax (alprazolam) in her system. (R.13919.) Xanax is a prescription drug that treats anxiety. (R.13840.) Uta may have taken Xanax twice. She had metabolite in her liver and one milligram of Xanax in her stomach, but no pill fragments in her stomach. (R.7164,13906-07.) Gastric content in her lungs and white residue in the bathtub reveals that she vomited the pills and then aspirated. (R.9441-44.)

Pills were scattered on the floor of her bedroom closet. (R.9441.) A chair was in the closet and clothes were spilling from the upper shelves, suggesting Uta stood on the chair to reach pills stored behind them. (R.9441.)

Side effects of Xanax include lack of coordination and loss of motor skills. (R.13896.) Her bedroom was in disarray – a lamp tipped over, and a vase and books knocked from her nightstand. (R.6935.) Her rug was kinked. (R.6935.)

Side effects also include disinhibition and self-mutilation. (R.9427,13923.) The evidence suggested she cut herself. The knife in the tub was the same brand as the knives she owned. (R.8803,8818.) Uta's DNA was on the handle and the blade. (R.9427.) Each cut was consistent with self-cutting. (R.13856-61.)

The evidence also suggests she cut herself in her bedroom, where there were spots of blood on her bedding, on her rug and in the hallway leading to the bathroom. (R.13629,13632.) In the bathroom, bloody handprints on the window sill and sink "line[d] up exactly" to where she would have steadied herself while lowering into the tub. (R.9428-29,9434-35.) The shower curtain and shampoo bottles were undisturbed. (R.9433-34.) And a towel by the tub had blood spots as if someone stood there while bleeding. (R.13630.)

Uta's history of medicating herself - Evidence also suggested Uta's death was a suicide. She suffered from anxiety and depression and took several medications. (R.14020,14186-87,14215-17,14189.) She self-medicated or sought professional treatment for sleeping, inflammation, back pain, asthma, allergies,

infections, menopause, depression, and anxiety. (R.13311,13670-72,14186-87,14189,14198,14194-95.) She had taken antidepressants. (R.14189-90.)

She also took medications that had not been prescribed to her and had medications from foreign countries. She had pills and inhalers obtained in Germany. (R.9515-16,14195.) The pills scattered on her closet floor were from Costa Rica. (R.6713.) She also used her sister's medications. (R.14174,14217.) She did not always follow prescription dosages. (R.14198.)

She did not have a prescription for Xanax, but Xanax is available online and widely shared. (R.13841,9320-21.)

Uta relabeled the pills she took. She took them out of their packaging and put them in test tubes or film canisters, in her handbag, in the bathroom, and in drawers and cabinets. (R.8854,13313,13352-53,13383,13665-67.) She took so many pills that she logged some of her doses on a calendar. (R.9537-38.) It is not clear whether she documented all the different pills she took. (R.9538.)

Uta's personal life – The problems in Uta's personal life may explain her state of mind. She had limited visitation with her four children. (R. 14412.) At one point, even that limited visitation had been restricted because DCFS found she had abused her son. (R.14293-94,14378-79,14406.)

Since she and Johnny divorced in 2006, they frequently argued about the children and photo albums – one of which was found floating in the tub with her. (R.8084,9194-95,14316,14321-22,14329-30,14470-71.)

In the months leading up to Uta's death, the custody dispute intensified, and with it, the resentment. (R.14333.) She told her sister she was at the end of her "tether." (R.7011-12.) Her home was more cluttered and disorganized than usual, a sign of depression or feeling overwhelmed. (R.13344-48.)

The night before Uta was found, a neighbor saw her shaking her head during a phone call and pounding hard on her keyboard sometime around 10:00 p.m. (R.13604-05.) She appeared to be upset. (R.13617.)

3. The Medical Examiner Agrees It Could Have Been Suicide

The medical examiner believed Uta's death was an accidental suicide or homicide, but the evidence made homicide unlikely. (R.13833-34.) As he put it, "if you tie it all together as a homicide and say that she sustained all of her injuries in the setting of homicide, as well as was homicidally poisoned, that's also a very, very rare beast and that's not something I've ever seen." (R.13835.)

He opined that each injury could have been self-inflicted or accidental. (R.13786.) He characterized the cuts on Uta's wrists and leg as superficial and agreed they could have been self-inflicted. (13794,13856-61,13869-71.) The marking on Uta's lip was "nonspecific" and not an actual injury. (R.13789,13839.)

He identified small internal hemorrhages in Uta's neck, which may have occurred after her death (R.13804-05.) Uta's injuries were consistent with losing her balance or falling against a sink or other surface. (R.13789-90,13792,13887-89 (injuries may have occurred before or after death), 14212-13 (Uta bruises easily).)

He found no injuries or marks to suggest Uta had been attacked. (R.13848-49.) He stated that if Uta had been involved in a “homicidal fight for her life,” he would “expect her to have more injuries.” (R.13835-36.) He certified the cause of death as drowning and the manner as “undetermined.” (R.13833-36.) He said the evidence supporting suicide was “equally compelling.” (R.13834.)

The lead investigator considered Uta’s death to be an accident or suicide and ordered police to close the case. (R.8837.) Police nonetheless “kind of dragged [their] feet and kept it open.” (R.8837.)

4. The State Argues It Was Murder

With the case still open, Uta’s boyfriend “push[ed] to have Johnny Wall investigated.” (R.8848.) Police eventually charged Johnny with murder. (R.1,8848,9154-56.) They identified the following circumstantial evidence that the State relied upon to support its homicide theory.

4.1 The State Identifies Circumstantial Evidence

Uta’s injuries – Uta had cuts on her wrist and leg. (R.13786.) She had small hemorrhages in her neck, which could have occurred after death. (R.13804-05.) And she had “nonspecific” markings on her face and lip. (R.13789.)

Xanax – When she died, Uta had intoxicating and nearly fatal levels of Xanax in her system, but no remnants of pills in her stomach, something usually found in overdoses. (R.7164,7196,7302-03,13906-07.) Instead, white residue at the bottom of the tub and gastric material in Uta’s lungs indicated she had aspirated

while she was drowning in the tub, vomiting whatever pill remnants had been in her stomach. (R.9441-44,13906-07.)

She did not have a prescription for Xanax. (R.1879.) She had not written “Xanax” or “alprazolam” on any of her pill bottles when she relabeled them, and she had not noted using Xanax on her calendar. (R.13669,13375.)

Johnny had access to prescription medications, including Xanax, as a pediatrician. (R.1879,1883.) He wrote prescriptions for Xanax for himself and his mother. (R.1879.)

The knife – A kitchen knife was found under Uta’s body. (R.8803.) The knife was the same brand as those in Uta’s house. (R.8818.) Uta’s DNA was on the knife’s handle and blade. (R.9427.)

Blood in the bedroom and bathroom – Investigators found spots of blood on her bedding, on her bedroom rug, in the hallway leading to the bathroom, and on a towel near the tub where she was found. (R.6887,13632,13629.)

Shoeprints in the kitchen – As first responders were leaving, investigators found three partial bloody shoeprints in the kitchen. (R.6889,6986;St.Ex.80.) First responders had not noticed them when they arrived, but did as they were leaving. (R.13403-04,13418,13631.) By that time, responders and police had met in the kitchen after walking through the bloody areas. (R.13628-29,9691-92.) Months later, investigators collected shoes from some of the responders, but they did not find a match. (R.8404.)

Latent protein stains – Investigators used amido black testing to look for traces of blood. (R.8415-16,8443.) Amido black is a chemical that identifies protein remaining on a surface that has been cleaned. (R.8415.) It can detect protein, including blood, that is several years old. (R.8843.)

Investigators performed the testing weeks after the family had cleaned the home. (R.14727-28,13673-74.) Protein had been cleaned up in the bedroom and bathroom, and there had been a spot on the bedroom wall. (R.8824.) The State's expert testified that the protein could have been left by "anything," including "[a] rag dropping on the floor," or "a transfer from any of the individuals in the house potentially that might have done the cleanup." (R.14731-32.)

Cold water – When Uta was found, cold water was running in the tub. (R.6654.) Uta had Raynaud's disease, a condition where she could not control temperature in her fingers. (R.7560-61.) People with Raynaud's disease would "[n]ot typically" take a cold bath because it would be painful. (R.7583.)

A noise – A neighbor heard a voice around 3 a.m. the day Uta was found. (R.8029.) The neighbor "couldn't make out what they were saying," but said it sounded like someone was "calling out." (R.8029.)

Not a burglary – There were no signs of forced entry and (months later) the spare key was missing from its usual hiding spot. (R.6648,8824-25,9255.)

Custody dispute – Johnny and Uta's relationship had been difficult since their divorce. (R.7817,8146-48.) They argued for years about their children,

visitation, and money. (R.7858.) While going through the divorce, Johnny joked with a friend who was also divorcing about what life would be like without Uta and “what if [they] both hired hitmen to get rid of their ex-spouses,” and at the time Johnny was thinking about moving out of state with the children, he asked a friend if it would “be bad if Uta wasn’t here anymore” or “there anymore.” (R.7827-29,7870-71.) By the summer of 2011, Johnny had decided to move back to California. (R.7666-69,7680.)

Uta’s mood – There was evidence Uta had been in a good mood the day before she was found. (R.1886,1888.)

Alibi – Johnny had no alibi for part of the morning of September 27. He went to a store for eggs sometime before 6:00 a.m. (R.14483-84,14903-04.) A witness saw him driving at 7:05. (R.14575.) His children saw him at home shortly after that and noticed his scratched eye from the night before. (R.14564,14567.) He had an alibi for the remainder of the day. (R.10169-70.)

Johnny’s scratches – The day Uta was found, Johnny had a scratch on his eye. (R.7948.) Johnny explained his dog had scratched him the night before, when he was sleeping outside on the porch with the dog as he often did. (R.14859,14904-08.)

Johnny also showed investigators scratches on his arms. Johnny explained they were from roses in his garden. (R.14923-24.)

Johnny's appearance – The day Uta was found, Johnny looked “disheveled” at work. (R.1883.) It appeared he had not bathed and was wearing the clothes he had worn the previous day. (R.1883.) But coworkers testified that in the summer of 2011, on multiple occasions Johnny came to work disheveled and wearing the same clothes as he had the previous day. (R.7860-61,7942-43.)

Car – Johnny had his car detailed that morning. (R.14594-98.)

Conflicting stories – When police interviewed Johnny, he said that he had last seen Uta the night before when he picked up his kids at her home. (R.144873-74.) He stayed in the car in the driveway and did not go inside. (R.14874,14926.) Months later, when Johnny was deposed in a civil case, he said Uta came to his house that night. (St.Ex.321:6.)

4.2 State Experts Provide Explanations

In the absence of evidence of homicide, the State presented experts who theorized about how the evidence could be construed to show a murder.

Xanax theories - The State theorized that, because Uta did not have a prescription for Xanax nor any personal record of taking it, she did not have Xanax or take it voluntarily before she drowned. (R.10121.)

To support that theory, the State's experts presented several theories about how Xanax might have gotten into her system. Because there was no evidence Uta had been restrained, the theories were creative.

One expert, Marcella Fierro, theorized the killer might have crushed some Xanax pills to make a slurry, then used a syringe to squirt the slurry under her tongue, leaving a bruise on her lip. (R.10010.) When asked about what happened, she said, “I’m a fan of simplicity. I think just making that slurry and sticking it in her mouth, giving her the bruise would work just fine for me,” because, of all the possible theories, “[t]hat’s the most rapid acting and one that would disable her so you could cut her wrists.” (R.10010.)

John Denton opined that the killer restrained Uta (without leaving a mark) and injected Xanax into the cut on her wrist where it would not leave a needle mark (while struggling with Uta, and somehow without breaking the needle). (R.13940-41,14013-15.) But Uta’s lungs did not have particulate material from the crushed pills blocking the blood vessels, as would be expected from Xanax administered by injection. (R.9445-46.)

The State theorized that, after forcing Uta to consume Xanax, the killer scattered pills on the floor to make it look like a suicide. (R.10175-76.)

Attack theories - The experts presented similarly creative and conflicting theories about what happened next.

Rod Englert opined that the Xanax would have rendered Uta unconscious while her killer dragged her into the bathtub, although he agreed the bathroom was too small to carry Uta to the tub. (R.13577;St.Ex.146.) He speculated Uta then “rall[ied]” when she hit the water and fought an attacker. (R.13539.)

Englert opined that Uta's injuries were defensive wounds from a "significant" or "violent" struggle. (R.13518,13523-24,13539-40.) He explained that the blood on Uta's top came from her cut wrist as she held it to her chest. (R.13505-07.) Englert theorized that the attacker pulled Uta's top off but could not explain why the attacker then folded it, and draped it over the side of the tub, where it remained dry as Uta was forced into the tub. (R.13539-40.)

Denton speculated that a struggle started in the bedroom, pointing to disarray in both the bedroom and bathroom. (R.13948.) His theory contradicted Englert's testimony that nothing was disturbed in the bathroom to indicate an altercation (R.13576-77.) And Denton theorized that Uta had been assaulted even though he observed no fingerprints, grab contusions, or bruises to suggest Uta was restrained. (R.13962,13988,13984.)

Fierro opined that the Xanax would have disabled Uta. (R.9993.) She said the killer cut Uta's wrist in the bedroom, after Uta was unconscious. (R.10010.) This contradicted Englert's theory that Uta held her bleeding wrist to her shirt. (R.13505-07.) Fierro opined that Uta did not cut herself because people who do are "almost always...young, young teen women." (R.10043.)

Under Fierro's theory, the killer dragged Uta to the bathroom and submerged her in cold water. (R.10010,10013.) Fierro testified that Uta had four fingertip bruises on the arm in mottled skin, as though someone had grabbed Uta from behind. (R.10001-02.) Fierro was the only expert who claimed to have

been able to see these injuries. She was also the only expert who reported seeing washer-woman changes on Uta's hands and feet. (R.10016-20.)

Time of death theories – Two of the State's experts agreed that Uta died before 6:30 a.m., when Johnny did not have an alibi. (R.10029,10130,13961.)

Under this theory, Uta was submerged for at least fourteen hours. Washer woman changes appear on a body submerged for more than an hour. (R.9462.) After ten hours of submersion, the changes become permanent. (R.9463.)

Neither the medical examiner nor the defense expert identified any washer woman changes on Uta. (R.10101-02,9471.) A lack of washer woman changes suggests Uta died closer to 8:00 p.m., when her boyfriend found her.

Only one of the State's experts, Fierro, claimed to have seen washer woman changes in Uta's autopsy photos. (R.10016-18.)

4.3 The State Misconstrues the DNA Evidence

In an effort to place Johnny at the scene, the State sought to introduce DNA test results from three sources: (i) a swabbing of Uta's pillow, (ii) vacuum samples from Uta's pillow and comforter, and (iii) scraping Uta's fingernails. The evidence was inconclusive, but misconstrued by the State to implicate Johnny.

Pillowcase - There was DNA found in two places on Uta's pillowcase. The first, a stain, was tested twice. (R.9023-24.) The first testing (Y-STR testing) included the Wall paternal line (Johnny and his sons), but the second, more specific testing (STR testing) excluded Johnny as a contributor of the DNA in the

sample. (R.9023-24.) Johnny moved to exclude the evidence of the Y-STR testing, since subsequent testing had made it irrelevant and misleading. (R.1702-03,1710-11.) The court denied the motion, but cautioned that the evidence would not be prejudicial if the Y-STR and STR test results were “explained and reported accurately to the jury...especially when reported together.” (R.1711.)

In violation of that order, the State’s experts refused to explain the test results together, insisting they were separate tests and did not inform one another. (R.9023-24,9074,9075.) Without mentioning the subsequent STR results excluding Johnny, the State’s expert repeatedly testified that the Y-STR results showed that the DNA “matched Johnny” and that “[h]e was the minor...profile.” (R.9023-24,9074,9075.)

The second DNA found on Uta’s pillowcase was obtained with a vacuum collection process (M-VAC). The results were inconclusive and did not identify Johnny. (R.9025.) But Sorenson included Johnny based upon unreliable activity below the lab’s analytical threshold, meaning the data “might be noise” from the equipment. (R.9915,9956.) Johnny filed a motion to exclude the results because they would confuse the jury, but the court denied the motion. (R.968,1712-19.) The court ruled the problems with the testing could be brought to the jury’s attention during cross-examination. (R.1715.)

The State’s expert nonetheless testified that Johnny’s unique DNA profile was “included as a possible contributor” to the sample, even though Johnny’s

alleles were not recorded at reliable levels. (R.5406,5420-21,9099.) Moreover, while Johnny is included, his children were also included, and because he shares all his alleles with his children, there is nothing “unique” about Johnny’s inclusion in the sample. (R.9050-51,9060-61,9914.) Yet the State reiterated its misrepresentation in closing and urged the jury to convict based on Johnny’s “unique” DNA profile being found on Uta’s pillowcase. (R.10140,10162.)

Fingernails - Investigators also found trace amounts of DNA under Uta’s fingernails—3 cells of male DNA for which there was “no meaningful comparison” between the sample and Johnny or the Wall paternal line. (R.1703,9011,9042-43.)

Johnny filed a motion to exclude the evidence, but the court denied the motion. (R.1707.) The court cautioned, however, that if the State did not present the evidence neutrally and accurately, it would be “unreliable under rule 702 and significantly prejudicial under rule 403 because it may be misleading and confusing to the jury.” (R.1707.) The court warned that the evidence could be used only “for exclusionary purposes,” and not as evidence of Johnny’s guilt. (R.1707-08.)

Despite the court’s order, the State urged the jury to treat Johnny as included as a contributor to the sample (which he was not) and convict him of Uta’s murder based on this sample: “Then we have male DNA being found under Uta’s right-hand fingernail clippings. I would submit to you it was as if

Uta was standing in this courtroom and pointing to the defendant as her killer.” (R.10141-42.) And yet, trial counsel failed to object.

5. Johnny Argues It Was Suicide

At the close of the State’s case, Johnny moved for directed verdict for insufficient evidence. (R.9357-61.) The court denied the motion. (R.9361-63.)

The defense experts testified Uta’s death was a suicide, not a murder. The experts, Judy Melenik and Anita Zannin, presented their own explanation of how the scene unfolded.

Melenik explained that the photo album corroborates the suicide explanation. (R.9428.) She testified that “people who self-injure or commit suicide, either one, will often have mementos next to them, things that comfort them or make them feel good, or things that they want to see as the last thing they see before they die. So the placement of that in the bathtub with her is significant.” (R.9428.)

The placement of the shirt on the side of the tub also corroborates the suicide explanation. “You also have the apparently dry, not torn, not cut through, folded tank top, which suggests that it was folded and removed before she entered the tub.” (R.9428.)

She further explained that the spilled pills suggested Uta had been looking for medication: “There is a chair in the closet with spilled pills, and the clothing is draping down from the upper shelves. And that suggests that the pills she

took were probably stored in the upper places of her closet....it's a sign of a person who's looking for their medications, is desperate to some degree, and is not in complete emotional control so they're spilling stuff as they're looking for their medications." (R.9441.)

Melinek theorized that, after Uta ingested the Xanax, she may have become disoriented and disinhibited. (R.9428.) She explained that "when medications are in your system that alter your mental status, they can put you in a situation where you're more likely to do things that you wouldn't normally do." (R.9427-28.)

Melinek concluded Uta was intoxicated when she committed a self-destructive act. (R.9429.) Because Uta's injuries were superficial and in easily accessible places, Melinek concluded Uta's injuries were self-inflicted, but that she did not intend to kill herself. (R.9402-05,9416-18,9421-23;St.Ex.59,169.)

Neither expert saw signs of an attack or struggle. The shower curtain was still on the rod, and the soap and bottles in the tub area were undisturbed. (R.9434.) There was no evidence more than one person was in the house. (R.9694.) Like the medical examiner, Melinek concluded all of Uta's other injuries were consistent with an accidental suicide. (R.9429-32,9446-47.)

Melinek opined that Uta got into her bathtub by herself. (R.9428-29,9433-35.) Specifically, bloody handprints on the window sill and sink "line[d] up exactly" to where a person would have steadied herself while lowering into the

tub. (R.9428-29,9433-35.) And “you don’t see smearing all over the place as if someone is struggling or fighting off somebody.” (R.9435.)

Melinek theorized that Uta might have been anxious or stressed, and she “enter[ed] the tub to relax or revive herself,” but then drowned as the medication rendered her unconscious. (R.9467-68.) Based on the absence of washer-woman changes on Uta’s skin, Melinek opined that Uta’s death occurred closer in time to when her boyfriend found her at 8:00 p.m. (R.9461,9471.)

6. Johnny is Convicted

Despite the absence of evidence placing Johnny at the scene, the jury convicted him of murder. (R.1969.) Johnny filed a motion to arrest judgment, arguing that the evidence was insufficient to support the verdict. (R.2024-44.) Specifically, Johnny argued the evidence supported two explanations that were equally likely – suicide and homicide. (R.2024-44.) Because the State did not present any evidence that made the homicide theory more plausible, the State had failed to prove guilt beyond a reasonable doubt. (R.2044.)

The court denied the motion, citing the “large quantum of evidence” presented during the four-week trial. (R.3472.) The court noted there was “strong circumstantial evidence” that the death was a homicide, and the jury was entitled to believe the testimony of “several expert witnesses” who theorized about how the Xanax could have been introduced into Uta’s system. (R.3472-73.)

Summary of the Argument

Johnny's conviction was based on the State's misconstruing circumstantial and DNA evidence. The State's theory was that Uta was attacked, restrained, and injected with Xanax, all without leaving a mark on her body or any DNA evidence. The fatal flaw in the State's theory is that no evidence places Johnny in Uta's home on the day she died, and the circumstantial evidence is more consistent with suicide, leaving it insufficient to support homicide beyond a reasonable doubt.

The only evidence the State identifies that purports to connect Johnny to the home is DNA evidence. But the DNA collected is that of Johnny's sons, who lived with Uta. Johnny's DNA is consistent with that collected only to the extent Johnny shares DNA with his sons. Some of the DNA evidence was inadmissible under rule 702 and all of the DNA evidence used to create a tenuous link between Johnny and the scene was misconstrued by the State in order to mislead and confuse the jury.

The evidence is insufficient to support that verdict because the inference that Johnny killed Uta is less likely than the inference that Uta killed herself, whether accidentally or intentionally. This court should reverse the conviction. At the very least, because the trial court erred in admitting some of the DNA evidence and trial counsel was constitutionally ineffective in failing to object to the State's mischaracterization of it, Johnny should get a new trial.

Argument

1. The Evidence Is Insufficient to Exclude Reasonable Doubt

Johnny's conviction was based on the State's construal of circumstantial evidence. That construal – that Uta was attacked, restrained, and injected with Xanax, all without leaving restraint marks on her body or any DNA evidence – was physically possible. But it is not the most reasonable explanation. The circumstantial evidence, including the lack of Johnny's DNA, is more consistent with suicide, leaving it insufficient to support homicide beyond a reasonable doubt. The State could place Johnny at the scene only by mischaracterizing DNA evidence whose source is almost certainly Johnny's children, not Johnny. The evidence is insufficient to support the verdict.

Under Utah law, appellate courts vacate convictions for insufficient evidence. *State v. Holgate*, 2000 UT 74, ¶ 18, 10 P.3d 346. To determine whether the evidence is sufficient, this court “review[s] the evidence and all inferences which may reasonably be drawn from it in the light most favorable to the verdict,” and will reverse “when the evidence, so viewed, is sufficiently inconclusive that reasonable minds must have entertained a reasonable doubt.” *State v. Pullman*, 2013 UT App 168, ¶4, 306 P.3d 827 (citations simplified).

When all of the evidence is circumstantial, it is more likely that reasonable minds entertained reasonable doubt. *State v. Workman*, 852 P.2d 981, 985 (Utah 1993). Courts review circumstantial evidence with more scrutiny: where “the

evidence consists solely of undisputed, circumstantial evidence, the role of the reviewing court is to determine...whether the inferences that can be drawn from that evidence have a basis in logic and reasonable human experience sufficient to prove each legal element of the offense beyond a reasonable doubt." *Id.*

Speculative inferences do not constitute proof beyond a reasonable doubt. *Workman*, 852 P.2d at 987. Thus, "[a] guilty verdict is not legally valid if it is based solely on inferences that give rise to only remote or speculative possibilities of guilt." *Id.* at 985.

The question, then, is whether the verdict was based upon reasonable inferences or speculation. This court has explained the difference as follows: "A reasonable inference is a conclusion reached by considering other facts and deducing a logical consequence from them. Conversely, speculation is defined as the act or practice of theorizing about matters over which there is no certain knowledge." *Id.* ¶16 (citation simplified.)

The distinction turns on whether there are equally likely interpretations of the evidence: "when the evidence supports more than one possible conclusion, none more likely than the other, the choice of one possibility over another can be no more than speculation." *Id.* (citation simplified). This court will therefore reverse if "the evidence is so insubstantial or inconclusive that the evidence and inferences did not preclude the reasonable alternative hypothesis presented by the defense." *State v. Cardona-Gueton*, 2012 UT App 336, ¶11, 291 P.3d 847.

Applying these principles, the Utah Supreme Court held that the evidence was insufficient to support the verdict in *Workman*. 852 P.2d at 987. In that case, parents were convicted of sexual exploitation of their minor daughter. *Id.* at 983. A family friend had taken a photo of the daughter with her buttocks exposed. *Id.* The elements of the crime required that the parents knew the photo was being taken and it was going to be used for sexual arousal. *Id.* at 985.

The State argued that the parents were guilty. *Id.* at 986-87. The parents appeared in the photo, but it is unclear whether they could see that the photo was being taken or that their daughter was exposed. *Id.* at 983-84. The State also cited evidence that the parents knew of several instances that the friend had behaved improperly toward the daughter, and they had reacted angrily when he took the photo. *Id.* at 987. The State argued the jury could reasonably infer from the circumstantial evidence that the parents had the requisite knowledge. *Id.*

The court disagreed: “Taken together, these events establish no probative inference” of the parents’ guilt. *Id.* at 987. The court explained that “[c]riminal convictions cannot rest on conjecture or supposition; they must be established by proof beyond a reasonable doubt. Arguing, as the State does, that speculative inferences can constitute proof beyond a reasonable doubt is to attack one of the most sacred constitutional safeguards at its core.” *Id.*

This court reached the same conclusion in *Cristobal*, where the defendant was caught spray painting graffiti with another juvenile. *State v. Cristobal*, 2010

UT App 228, ¶ 4, 238 P.3d 1096. His conviction was enhanced under the statutory enhancement “for having acted in concert with two or more persons.” *Id.* ¶ 5 (citation simplified). The State articulated a plausible theory, consistent with the circumstantial evidence, that a third juvenile had participated in the crime. *Id.* ¶ 10. Indeed, a third juvenile fled the scene when a security officer arrived, and a spray paint can lid was found where he had been standing. *Id.* The State argued that the third juvenile’s running away supported a reasonable inference that he had participated in the crime. *Id.* ¶ 17.

This court disagreed. *Id.* The State’s theory was possible, but no more probable than the alternative theory. *Id.* As the court explained, “there are at least two equally reasonable explanations” for why he fled—either he was participating, or he was merely present. *Id.* “[H]is presence and flight do not make it more probable that he was an active participant in the crime than the equally reasonable possibility that he was merely present during the crime.” *Id.*

Thus, the evidence supported speculation, but not a reasonable inference, that the third juvenile participated in the crime. *Id.* When two explanations are equally reasonable, the evidence is “too weak and too speculative to support a conclusion beyond a reasonable doubt.” *Id.* ¶¶ 17,20 (citation simplified).

The same is true here. The evidence, at best, supports two reasonable inferences. As discussed below, most of the evidence is consistent with both suicide and homicide. None of the evidence makes homicide more probable, but

some of it makes suicide much more probable – e.g., the State cannot explain why Uta neatly folded her shirt and draped it over the side of the tub as she was being attacked, or why her handprints line up “exactly” to where she would place them if she lowered herself into the tub, or how Johnny left no injury on Uta or any DNA or fingerprints in her home.

In short, the evidence does not make homicide more likely, let alone extinguish reasonable doubt. The evidence is insufficient to support the verdict.

1.1 Uncontested Evidence Supports Both Explanations

The State relied on the following uncontested circumstantial evidence. But none of the evidence makes homicide more likely than suicide.

Uta’s injuries – Uta had cuts on her wrist and leg, small hemorrhages in her neck, and “nonspecific” markings on her face and lip. (R.13786,13789,13805.)

The injuries are consistent with homicide. One of the State’s experts testified Uta’s injuries were defensive wounds (R.13536 (Englert)). Another State expert theorized that a killer restrained Uta and cut her after she was unconscious. (R.9993,10000-02 (Fierro).) Although the State’s theories required a killer to force Uta into the bathtub, the State’s expert acknowledged that the bathroom was too small for a person to carry Uta to the tub. (R.13577;St.Ex.146.)

The injuries are more consistent with suicide, especially given the size of the bathroom. The medical examiner listed the manner of death as “could not determine.” (R.13833.) As he explained, he “reserves” an undetermined manner

of death “for a case in which the findings supporting one or another manner of death are sort of equally compelling.” (R.13834.) This is best indication that suicide and homicide are at least equally probable, requiring reversal.

Contrary to the State’s theory, the medical examiner found no injuries or marks to suggest Uta had been attacked or restrained. (R.13848-49.) He believed the injuries were consistent with suicide or an accident. (R.13789,13833-36.) He agreed Uta could have sustained the injuries by herself, by losing her balance or falling against a sink or other surface. (R.13789-90,13792.) Alternatively, the injuries could have occurred after death. (R.13804-05.) He stated that if Uta had been involved in a “homicidal fight for her life,” he would “expect her to have more injuries.” (R.13835-36.)

Xanax – Uta had severely intoxicating and nearly fatal levels of Xanax in her system when she died. (R.13919.) Although she had one milligram of Xanax in her stomach, she did not have pill remnants in her stomach, an indication of overdose. (R.7164,7196,7302-03,13906-07.)

She did not have a prescription for Xanax. (R.1879.) She had not written “Xanax” or “alprazolam” on any of her pill bottles when she relabeled them, and she had not noted using Xanax on her calendar. (R.13669,13375.)

Johnny had access to prescription medications, including Xanax, because he is a pediatrician. (R.1879.) He had written prescriptions for Xanax for both

himself and his mother. (R.1879.) And he had personally filled the prescription for his mother and mailed it to her. (R.1893-94.)

The Xanax evidence is consistent with homicide. As a physician, Johnny had access to Xanax and the syringes the State's experts believed were used to get Xanax into Uta's system. Based on the evidence that Uta did not have a prescription for Xanax or any personal notes of taking Xanax, one reasonable inference is that she did not have Xanax. And based on the evidence that she did not have pill remnants in her stomach, one plausible explanation is that the Xanax entered her system through an injection.

But the evidence is equally consistent with suicide. An equally plausible interpretation of the evidence is that Uta had and took Xanax pills that she hid from others, something one about to commit suicide would do.

The evidence suggests Uta would have wanted Xanax. She experienced anxiety and depression, and had taken antidepressants. (R.14186-90.) It is also plausible that Uta obtained Xanax even though she did not have a prescription. She had pills from other people and from other countries. (R.9515-16,13352, 14195,14218,14245,14271.)

And it is plausible her Xanax was in a bottle she relabeled with a different name. Indeed, the State offered no explanation for why Uta repackaged all of her pills, and one reasonable explanation is that she did so to disguise their contents. This is consistent with the evidence suggesting she hid some of her pills on the

top shelf of her closet. (R.94414.) Indeed, the chair pulled into her closet and the clothes spilled from the top shelf suggest she stood on the chair to reach pills hidden behind her clothes. (R.9441.) One reasonable explanation for the spilled pills on the closet floor is that Uta dumped them out while looking for her Xanax, not that someone brought the Xanax to the home. (R.9441.)

The evidence also suggests Uta vomited some of the pills she took, explaining why there was Xanax in her stomach but no pill fragments. This was the defense expert's conclusion based on white residue at the bottom of the tub and gastric material in Uta's lungs. (R.9441-44,13906-07.)

The knife – A kitchen knife was found under Uta's body in the bathtub. (R.8803.) The brand of the knife was Zwilling J.A. Henckels, the brand of the knife set Uta and Johnny divided when they divorced. (R.8818.)

The knife is consistent with homicide. If Johnny killed Uta, he could have brought the knife from his home, or retrieved it from Uta's kitchen. (R.8818.)

The knife is equally consistent with suicide. Because Uta kept half the knife set in the divorce, it is equally probable she retrieved the knife from her own kitchen and used it to inflict injuries on herself. This explains why her DNA – not Johnny's – was on the knife handle and blade. (R.9427.)

Blood in the bedroom and bathroom – Investigators found spots of blood on her bedding, on her bedroom rug, in the hallway leading to the bathroom, and on a towel near the tub where she was found. (R.6887,13632,13629.)

The blood evidence is consistent with homicide. One of the State's experts opined that the blood spots indicated that more than one person was involved in a "significant" or "violent" struggle. (R.13518-19,13522-24.)

The blood evidence is consistent with suicide. A defense expert opined that the spots are consistent with self-cutting. (R.9416-18,9421-23,169.) As expert explained, "what's notably absent are grab marks on the wrist. So if this was being done to her against her will, she's not going to leave her wrist there and let someone stab her and slice her all in line trying different orientations." (R.9422.)

Blood spots down the hall traced her path to the bathroom. (R.13629.) The blood on the towel near the tub suggested she stood in front of the tub for a while before getting in. (R.13630.)

Shoeprints in the kitchen – Investigators found three partial bloody shoeprints in the kitchen. (R.6889,6986;St.Ex.80.) First responders had not noticed them when they arrived, but noted them only as they were leaving. (R.13403-04,13418,13631.) By that time, responders and police had met in the kitchen after walking through the bloody areas of the house. (R.13628-29,9691-92.) Months later, investigators collected shoes from some of the responders, but they did not find a match. (R.8404,14740-42.)

The footprint evidence is consistent with homicide. If a killer was in Uta's home, the killer could have stepped in the blood on the bedroom floor and left bloody footprints as he left her house. The footprint was not matched to Johnny.

The shoeprint evidence is equally consistent with suicide even though there is no evidence Uta returned to the kitchen after cutting herself. The evidence suggests the shoeprints were made by one of the first responders whose shoes were not collected for comparison – not a killer.

Latent protein stains – Investigators used amido black testing to look for blood that had been cleaned up. (R.8415-16,8443.) They conducted their test weeks after authorities released the home to family, who cleaned it. (R.14727-28,13673-74.) The test revealed that protein had been cleaned up in the bedroom and bathroom. (R.8824.)

The latent protein evidence is consistent with homicide. If a killer was in Uta's home, he could have stepped in blood, left shoeprints, and then cleaned the shoeprints and wall before leaving. But the State did not explain why a killer would clean up some blood while leaving other blood untouched and visible.

The latent protein evidence is equally consistent with suicide. The protein identified by the testing was not necessarily blood and could have been left years ago. (R.8415,8843.) And even if it was blood, it was equally possible Uta's family created the latent blood spots as they cleaned her home. (R.14731-32.) Indeed, the State's expert conceded the protein could have been left by "anything," including "[a] rag dropping on the floor," or "a transfer from any of the individuals in the house potentially that might have done the cleanup." (R.14731-32.)

Cold water – When Uta was found, cold water was running in the tub. (R.6654.) Uta had Raynaud’s disease, a condition in which her fingers would be cold. (R.7560-61.) People with Raynaud’s disease would “[n]ot typically” want to put themselves in a cold bathtub because it probably would be painful. (R.7583.)

This evidence is consistent with homicide because Uta likely would not have wanted to submerge herself in cold water.

But this evidence is equally consistent with suicide. The amount of Xanax in Uta’s system would have caused her to become quite sedated. (R.13212.) It is plausible she would have attempted to revive herself with cold water, but drowned as the medication rendered her unconscious. (R.9467-68.) It is also plausible that she prepared an overly warm bath, turned on the cold tap after lowering herself into the tub, then drowned as the Xanax took effect. (R.13212.)

A noise – A neighbor heard a voice around 3 a.m.; she “couldn’t make out what they were saying,” but it sounded like someone was “calling out.” (R.8029.)

This evidence is consistent with homicide and suicide. It is no more probable that Uta called out while being attacked than while committing suicide.

Not a burglary – There were no signs of forced entry and (months later) the spare key was missing from its usual hiding spot. (R.6648,8824-25,9255.)

This evidence is consistent with homicide. Uta might have opened the door for Johnny. It is also possible one of his children told him where to find the spare key, although there is no evidence they did so. (R.8824,14561.)

This evidence is equally consistent with suicide. If Uta killed herself, no one would have entered the home.

Custody dispute – Johnny and Uta’s relationship had been difficult since their divorce. (R.7817,8146-48.) They argued for years about their children, visitation, and money. (R.7858.) During the divorce, Johnny joked with a friend who was also divorcing about what life would be like without Uta and “what if [they] both hired hitmen to get rid of their ex-spouses,” and when Johnny was thinking about moving out of state with the children, he asked a friend if it would “be bad if Uta wasn’t here anymore” or “there anymore.” (R.7827-29,7870-71.) By 2011, Johnny decided to move to California. (R.7666-69,7680.)

This evidence is consistent with homicide; it explains a motive for Johnny to kill Uta. But this evidence is equally consistent with suicide; it explains why Uta became depressed or anxious and overdosed on Xanax.

Uta’s mood – There was evidence Uta had been in a good mood the previous day. (R.1886,1888.)

This evidence is consistent with homicide because if Uta had been in a good mood the previous day, she may not have voluntarily taken Xanax.

But the evidence was also consistent with suicide. Even if Uta had been a good mood earlier in the day, the disputes with Johnny were a significant source of ongoing stress. (R.14333,7011-12.) When Jonny picked up the children that evening, he rolled up the car window and ignored Uta when she tried to speak to

him about taking the children out of town. (R.9205.) Later that night, a neighbor saw Uta shaking her head during a phone call and pounding hard on her keyboard. (R.13604,13617-18.) Uta appeared upset. (R.13617.) When her body was discovered the next day, Uta's house was cluttered and disorganized, and it appeared that Uta had not done her routine tasks, which is a sign of depression. (R.13342-47.) (R.13344-48.) The evidence is consistent with Uta becoming anxious or depressed and taking Xanax.

Alibi – Johnny had no alibi for part of the morning of September 27. He went to a store for eggs sometime before 6:00 a.m. (R.14483-85,14903-04.) A witness saw him driving at 7:05. (R.14575.) His children saw him at home shortly after that and noticed his scratched eye from the night before. (R.14564,14567.) He had an alibi for the remainder of the day. (R.10169-70.)

The State argued that Uta died before 6:30 a.m., precisely when Johnny did not have an alibi. (R.10029,10130,13961.) The defense argued that Uta's death occurred closer in time when she was found at 8:00 p.m. (R.9461,9471.)

This evidence is consistent with homicide. If Uta died before 6:30 a.m., then Johnny had an opportunity to kill her. But if Uta died before 6:30 a.m., she should have had permanent washer woman changes. (R.9463.) Neither the medical examiner nor the defense expert observed any washer woman changes, even though one of the State's experts claimed to have been able to see very faint

changes. (R.9463,9471,10101-02,10016-18.) It was therefore more reasonable to believe Uta died closer to 8:00 p.m., when her boyfriend found her.

Johnny's scratches – The day Uta was found, Johnny had a scratch on his eye. (R.7948.) Johnny explained his dog had scratched him the night before, when he was sleeping on the porch with her as he often did. (R.14904-08.)

Johnny also showed investigators scratches on his arms. Johnny explained they were from roses in his garden. (R.14923-24.)

This evidence is consistent with homicide. If Johnny attacked Uta, she might have scratched him on his eye and arms. But if Uta scratched Johnny hard enough to leave marks, his DNA should have been under her nails (it was not).

This evidence is consistent with suicide. The scratches may have come from his dog and rose bushes. Indeed, the optometrist who examined Johnny said the injury was consistent with a scratch from a dog's claw. (R.14646.) And Johnny's coworker testified the scratches on Johnny's arm looked "like a pinprick or a needle kind of, not – not like a fingernail scratch but a thinner scratch." (R.14463.)

Johnny's appearance – The day Uta was found, Johnny looked "disheveled" when he came to work. (R.1883.) It appeared he had not bathed, and he seemed to be wearing the clothes he had worn the previous day. (R.1883.)

This evidence is consistent with homicide. If Johnny killed Uta, he may have been running late in the morning, and failed to get ready for work.

But this explanation seems unlikely. The State theorized Johnny violently attacked Uta with a knife and then dragged her into the bathroom, leaving a trail of blood. (R.13518,13577,13308,13948,13962.) In this scenario, it seems likely that at least some blood would have ended up on Johnny's clothes. It therefore seems unlikely that Johnny would fail to change his clothes upon returning home — especially if he were trying to cover up the murder as the State theorized.

This evidence is therefore equally — if not more — consistent with suicide in light of the lack of blood on Johnny's clothes. It is reasonable to believe Johnny failed to get ready for the day and came to work disheveled and wearing the same clothes, as he had on other occasions. (R.7860-61,7942-43.)

Car – Johnny had his car detailed that morning. (R.14594-98.)

This evidence is consistent with homicide and suicide, but not probative of either. Even under the State's theory, there was no blood on the clothes Johnny still wore from the day before, so there is no basis for believing Johnny needed to have blood cleaned from his car. (R.1883.)

Conflicting stories – When police interviewed Johnny, he said he last saw Uta the night before when he picked up his kids at her home. (R.144873-74.) He stayed in the car in the driveway. (R.14874,14926.) Months later, when deposed in a civil case, Johnny said Uta came to his house that night. (St.Ex.321:6.)

This evidence is consistent with homicide and suicide. Neither version of Johnny's story put him in Uta's house.

1.2 Evidence That Makes Suicide More Plausible

The following additional evidence makes suicide more plausible.

Uta's shirt – The placement of Uta's shirt is more plausibly explained by suicide than by homicide. Her shirt was dry, folded, and neatly draped over the side of the tub. (R.9428,9433.) The placement of the shirt suggests Uta did it herself. Specifically, it was folded and draped the same way as Uta had draped other clothing over her rocking chair. (R.9433.)

None of the State's theories provide a plausible explanation for why the killer or Uta would have neatly folded and draped her shirt before she was forced into the bathtub. Nor do they explain how the shirt could have remained neatly draped and dry during a struggle. Suicide is the more likely explanation.

Uta's handprints – Uta's bloody handprints in the bathroom are also more plausibly explained by suicide than by homicide. As the defense expert testified, "[t]hey all line up exactly as the movements she would have needed to make with blood-stained hands as she lowered herself in the tub without another person's involvement." (R.9429.) And "you don't see smearing all over the place as if someone is struggling or fighting off somebody." (R.9435.)

The State's explanation is that this is where Uta placed her hands when she "rallied and was fighting back." (R.13539.) That scenario would explain blood splatter on the walls (there was none), defensive wounds (there were none), or bathroom items in disarray (they were not). But that scenario is inconsistent with

Uta standing in the tub with both arms extended, as she must have done to leave the prints. Suicide is the more likely explanation.

Lack of DNA or prints – The lack of Johnny’s DNA or fingerprints in Uta’s home is more plausibly explained by suicide. It is difficult to understand how Johnny – or anyone – could have entered the home, attacked Uta, forced her to consume Xanax, cut her repeatedly, dragged her to the bathroom, fought her off, and forced her into the tub without leaving a single fingerprint or trace of DNA.

Recognizing that problem, the State misconstrued the DNA evidence to tell the jury that it “pointed” to Johnny, even though it did not, in violation of the court’s order. As discussed below, that misconduct warrants a new trial because, in fact, the DNA evidence reveals that Johnny was not there.

1.3 No Evidence Places Johnny in Uta’s Home

Suicide is more likely given all of the circumstantial evidence. But there is an even more striking evidentiary issue that reveals the insufficiency of the evidence: no evidence places Johnny at the scene.

Johnny denied being at Uta’s home at the time in question. (R.14903-04,14982-83,10224.) No one observed Johnny or his car at Uta’s home. (R.10223-24.). His fingerprints were not found in her bedroom, in her bathroom, on the pillboxes, or on the knife. And neither her blood nor her DNA were found in his home, in his car, or on his clothing. (R.8985-87.) Although the prosecution conveyed to the jury that Johnny’s DNA was found under Uta’s fingernails, that

was false: the testing was inconclusive, neither including nor excluding Johnny. (R.1703,9011.)

That leaves only the DNA on Uta's pillow and comforter. The more informative and comprehensive STR test excluded Johnny as a contributor to the pillowcase stain. (R.9024,15270.) And while Sorenson included Johnny as a possible contributor to the M-VAC pillowcase sample, it did so based on data so unreliable that could not exclude equipment noise. (R.5406,5420-21,9025,9048.) More important, Johnny's children share all his alleles, making it impossible to distinguish Johnny from his children, who lived at the home. (R.9025,9050-51,9914.) The same is true for his inclusion in the sample from the comforter, which included Johnny, his children, Uta, Nils, and one in twenty Caucasians. As demonstrated below, it is much more likely that the DNA came from the children (who lived in the home, laid on the bed, and did laundry together), than from Johnny. (9020,9050-51,9914.)

In sum, "the evidence is so insubstantial or inconclusive that the evidence and inferences did not preclude the reasonable alternative hypothesis presented by the defense." *Cardona-Gueton*, 2012 UT App 336, ¶ 11 (citation simplified). This court should vacate the conviction and enter judgment in favor of Johnny.

2. The DNA Evidence Was Inadmissible and the State Mischaracterized It

With no witnesses or fingerprints placing Johnny at the scene, the jury likely based its verdict on four DNA tests – one of which should have been excluded under rule 702 because it was unreliable and all of which were mischaracterized by the State. The trial court should have excluded the inadmissible evidence, and trial counsel was ineffective in failing to object to the State’s mischaracterizations of the evidence and prosecutorial misconduct.

The defense moved to exclude the four DNA tests prior to trial. (R.1702-03.) The court admitted the evidence while warnings to the State to present the evidence accurately, in accordance with [State v. Jones, 2015 UT 19, ¶¶ 30, 33, 35, 345 P.3d 1195](#). (R.1707-09,1711.) The State disregarded the court’s warnings and misrepresented the DNA evidence to confuse and mislead the jury.

Pillowcase Stain (Item 5.3) -The State represented that Johnny’s DNA was found in a sample collected from a stain on Uta’s pillowcase. The State’s expert testified Johnny was a possible contributor to a stain, even though more specific testing on the *same* item *excluded* Johnny. (R.9023-24.)

M-VAC of Pillowcase (Item 25.1) and Comforter (Item 13.4) - The State misrepresented evidence concerning the M-VAC samples from the pillowcase and comforter. As for the pillowcase, the State’s expert claimed the results included Johnny, but they based the inclusion on admittedly unreliable data that might have been equipment noise. (R.1712,9069.)

Johnny shares alleles (genetic sequences that make up DNA) with his children, who lived with Uta. The M-VAC process collected numerous alleles from all the DNA in the pillowcase and comforter. If the alleles of Johnny's children were present, then Johnny's alleles were too, but only because he shares his alleles with his children. (R.9050-51,9060-61.) Nonetheless, the State urged the jury to convict based on Johnny's "unique" STR profile being found on the pillowcase and comforter. (R.10140.)

Because the M-VAC process collects DNA from deep in the layers of the fabric, it is very likely that these samples contained accumulated DNA from all household members, including the children. (R.9018,9054.) But the State misrepresented the testimony in closing and argued that the DNA must be from Johnny rather than the children because the DNA was found at a "pinpoint location." (R.10162.) This was false.

Fingernails - The State told the jury that Johnny's DNA was found under Uta's fingernails. But there was so little male DNA found under Uta's fingernails that the expert reached "no meaningful conclusion" about whether Johnny was a possible contributor. (R.1703,9011.) And yet the State misrepresented the evidence to the jury: "I would submit to you it was as if Uta was standing in this courtroom and pointing to the defendant as her killer." (R.10142.)

In short, none of the DNA evidence implicates Johnny, even though on the State's theory of the crime, his DNA should have littered the crime scene. The

trial court should have excluded the evidence under rule 702, and trial counsel should have objected when the State mischaracterized the evidence at trial. Both the evidentiary error and counsel's ineffective assistance require reversal.

2.1 Background About STR and Y-STR DNA Testing

Sorenson Forensics conducted two types of DNA tests on the evidence at issue: Y-STR testing on the fingernail scrapings (Item 2) and the pillowcase stain (Item 5.3) (R.1703,1710,9022.), and PCR short-tandem-repeat (STR) testing on the pillowcase stain (Item 5.3) and on the vacuum samples from the pillowcase (Item 25.1) and the comforter (Item 13.4) (R.9022,9097,9099).

Y-STR Testing - Every person has 23 chromosomes inherited from each parent, which form 23 pairs. (R.8970-71.) The 23rd pair determines sex and contains an XY combination for males or an XX combination for females. (R.8970-71.) Y-STR testing examines only the male Y-chromosome. (R.8976-77,9078.) All males in a paternal line (fathers and sons) share the same Y-STR profile. (R.8977,9042,9088-89.) Y-STR testing cannot differentiate between males in a paternal line. (R.8978-79,9088-89.) In this case, that means that Y-STR testing cannot differentiate between Johnny and his two sons.

STR Testing - Short tandem repeat (STR) testing looks at alleles (genetic sequences) on the first 22 pairs of chromosomes. (R.8971,8974.) A person's STR profile is the sequence of alleles. No two people (except identical twins) share the exact same STR-DNA profile.

But although a person's STR profile is unique, individual *alleles* are *not* unique. (R.9046.) Indeed, alleles are inherited from the mother or the father, meaning children share alleles with their parents. (R.8974.) Significantly here, Johnny's children together share *all* his alleles, meaning *every allele* Johnny possesses is also possessed by his four children. (R.9061.) Therefore, a sample containing DNA from all of Johnny's children, but not Johnny, will contain Johnny's STR profile (all of Johnny's alleles). (R.9051-52,9060-61.)

A STR sample may have DNA from one person or from many people. (R.8975,9043-44.) According to Sorenson, analysts can draw three conclusions from mixtures: (i) a statistical likelihood that a person is a possible contributor, (ii) an exclusion (if any of a person's alleles are missing where they would be expected to appear), or (iii) the test is inconclusive. (R.8978,9046,9069,9003.)

Importantly, Sorenson can conclude only there is a statistical likelihood that a person is a possible contributor based on the person's alleles being present in the mixture — *not whether the person actually contributed DNA*. (R.9052-53.) Thus, a person can be included as a *possible* contributor, without being an *actual* contributor. (R.9061-63.) The higher the inclusion statistic, the more likely that a certain person actually contributed DNA. (R.8999-90.) If the statistic is above 1 in 298 billion, Sorenson can testify "with a reasonable degree of scientific certainty" that the DNA comes from a specific person. (R.8999-90.)

2.2 Expert Testimony About the DNA Extracted from the Pillowcase Violated Rule 702

Johnny filed a motion in limine to exclude the testimony that he was a possible contributor to the sample extracted from the pillowcase by M-VAC (Item 25.1). (R.968,1712-19.) Because Johnny's alleles were not observed above the threshold for reliability, Johnny should have been *excluded*. (R.9046-47,9069.) But the court allowed the evidence. (R.1715,1717-19.)

Trial courts are gatekeepers that ensure "a minimal threshold of reliability for the knowledge that serves as the basis of an expert's opinion." *State v. Jones*, 2015 UT 19, ¶26, 345 P.3d 1195 (citation simplified). The State had the burden of establishing reliability. *State v. Guard*, 2015 UT 96, ¶ 65, 371 P.3d 1.

Scientific evidence must be based on the "inherent reliability of the underlying principles and techniques." *State v. Butterfield*, 2001 UT 59, ¶ 29, 27 P.3d 1133. Because the State did not establish that Sorenson's method was widely accepted in the community, it had to make a threshold showing of reliability under rule 702(b). (R.1714.) Under rule 702(b), the underlying principles and methods must be (i) reliable, (ii) based on sufficient facts or data, and (iii) reliably applied to the facts. *Utah R. Evid. 702* adv. comm. note; *Jones*, 2015 UT 19, ¶ 21.

Here, the State failed to make a threshold showing that Sorenson's methodology was reliable or reliably applied. (R.1714-15.) On the contrary, Sorenson's director, Dan Hellwig, testified that Sorenson's method of including Johnny as a possible contributor was *unreliable*. (R.1713.)

Based on the capabilities of its methodologies and equipment, Sorenson has established a threshold, called the “analytical threshold,” which Sorenson set at 50 RFU. (R.5337-38,5391-92.) This threshold “defines the minimum height requirement at and above which detected peaks can be reliably distinguished from background noise.” (R.5406.) In other words, for activity below this threshold, Sorenson has no confidence the material is DNA rather than equipment noise or an artifact. (R.5406,5420,9915.)

Where Johnny otherwise would have been excluded because his alleles were not recorded at reliable levels, Hellwig testified Sorenson observed activity below the analytical threshold, which it noted with an asterisk, meaning “Inconclusive for the presence of additional alleles.” (R.5420.) Regarding this “[i]nconclusive” activity, Hellwig testified, “*It’s not reliable....I’m uncertain if [sic] whether it’s truly DNA, but it gives me enough of a question or it is information I will use in my interpretation.*” (R.5420-21 (emphasis added).)

Hellwig acknowledged Johnny’s inclusion was based on questionable, inconclusive, and unreliable data below the threshold at which Sorenson’s equipment and methodologies are capable of distinguishing DNA from background noise. (R.5406,5420-21.) The State did not demonstrate that (despite Hellwig’s testimony to the contrary) Sorenson’s methods were reliable and reliably applied to include Johnny as a possible contributor. The admission of the evidence therefore violated [rule 702](#), and the court abused its discretion.

2.3 Trial Counsel Was Constitutionally Ineffective in Failing to Object When the State Misconstrued the DNA Evidence

Prior to trial, the defense argued that the four DNA tests at issue here should be excluded as irrelevant and unduly prejudicial under rules 402 and 403. (R.1702-03,1707-08,1710-11,1718-19.) In denying the motions, the trial court cautioned the State to provide neutral and accurate testimony on the DNA evidence to avoid encouraging the jury to draw improper inferences. (R.1707-11, 1718-19.) Contrary to the court's order and in violation of Utah law, the State mischaracterized the DNA evidence to mislead the jury. Inexplicably, trial counsel failed to object. Counsel was ineffective.

To establish a claim of ineffective assistance, a defendant must show that counsel's performance was deficient in that it fell below an objective standard of reasonableness and "there is a reasonable probability that the outcome of the trial would have been different" but for counsel's deficient performance. *State v. Montoya*, 2004 UT 5, ¶23, 84 P.3d 1183 (quotation omitted). Both are present here.

2.3.1 Trial Counsel's Failure to Object Was Deficient

At trial, the State repeatedly mischaracterized the DNA test results, in violation of the trial court's order in limine and Utah law. The State conveyed to the jury that Johnny's DNA was found in Uta's home and under her fingernails, even though it was not. The mischaracterizations are particularly egregious – and prejudicial – given the lack of *any* evidence placing Johnny at the scene. Trial counsel was constitutionally deficient in failing to object to the State's

mischaracterizations, especially where the trial court had previously warned the State not to mischaracterize the DNA evidence. (R.1707-11,1718-19.)

In assessing the reasonableness of counsel's performance, courts "look to prevailing professional norms." *State v. Lenkart*, 2011 UT 27, ¶ 27, 262 P.3d 1. Prevailing professional norms require trial counsel to object to prejudicial mischaracterizations of the evidence and prosecutorial misconduct. *See, e.g.*, ABA Standards for Criminal Justice: Prosecution and Defense Function ("ABA Stds."), Standards 4-1.5, 4-4.4(e), 4-7.6(e) (4th ed. 2015).

A prosecutor commits misconduct when he "call[s] to the attention of the jury a matter it would not be justified in considering in determining its verdict." *State v. King*, 2010 UT App 396, ¶ 21, 248 P.3d 984. Defense counsel's failure to object is prejudicial where "there is a reasonable likelihood that, in its absence, there would have been a more favorable result." *Id.*

As the Utah Supreme Court has explained, unless "expert testimony is presented accurately" and "the evidence's scientific limitations are properly described to the jury," it may be unfairly prejudicial and confuse the jury. *Jones*, 2015 UT 19, ¶ 30. The court has also cautioned prosecutors to "properly and accurately present Y-STR DNA evidence" in particular, and has emphasized "the duty of defense counsel to counter any errant or incomplete testimony." *Id.* ¶ 35. Defense counsel had an obligation to ensure the DNA evidence was presented accurately and was ineffective for failing to do so.

Set forth below are the DNA test results the State mischaracterized, followed by a discussion of prejudice.

Fingernail scrapings (Item 2) - The State conveyed to the jury that Johnny's DNA was found under Uta's fingernails even though Sorenson concluded there was "no meaningful comparison" to Johnny and his sons – they could not be excluded or included. (R.1703,9011,9042-43.)

Johnny filed a motion to exclude the evidence. The court denied the motion, but cautioned that if the State did not present the evidence neutrally and accurately, it would be "unreliable under [rule 702](#) and significantly prejudicial under rule 403 because it may be misleading and confusing to the jury." (R.1707.) Specifically, the evidence could confuse or mislead the jury into thinking Johnny was *included* as a potential contributor. (R. 1707-08.) The court cautioned "the State to ensure its expert provides neutral testimony on this subject so as not to encourage the jury to draw an improper inference from the evidence" and warned that the evidence "may only be used for exclusionary purposes and the jury is not to use the test results as evidence of Defendant's guilt." (R.1707-08.)

At trial, Jeskie testified that Johnny "could not be excluded, could not be included. There were no conclusions that could be drawn." (R.9011.) Jeskie then contrasted Johnny with nine other individuals who *were* excluded. (R.9012-13.)

In closing, the prosecution argued that "Nils' DNA was excluded from her fingernail cuttings," and that the small amount of DNA "was enough to exclude

every other individual that was in that crime scene and to exclude Jack and Nils, but it wasn't enough to say anything about the defendant." (R.10163.) The State said Johnny made up a story to "account for that DNA under the fingernails that he's being accused will be there, but because the water is washed away we really won't know the answer. We had so little DNA left to test." (R.10163.)

The State reminded the jury Johnny had a scratch on his eye, and urged the jury to assume the DNA under Uta's fingers was Johnny's:

Then we have male DNA being found under Uta's right-hand fingernail clippings. *I would submit to you it was as if Uta was standing in this courtroom and pointing to the defendant as her killer.*

(R.10141-42 (emphasis added).)

The State used the fact that no meaningful comparison could be drawn to Johnny's Y-STR profile to mislead the jury into thinking it was Johnny's DNA under Uta's fingernails. Despite the court's warnings, the State asserted Sorenson's conclusion of "no meaningful comparison" was evidence of Johnny's guilt. (R.10141-42.) In so doing, the State mischaracterized the evidence and violated the court's order. Defense counsel was deficient in failing to object.

Pillowcase stain (Item 5.3) - The State misled the jury into thinking that Johnny was a possible contributor to the sample from the pillowcase stain, even though more comprehensive DNA testing *excluded* him.

Sorenson conducted Y-STR testing on the pillowcase stain sample, which included Johnny and his sons as possible contributors. (R.9023,9075.) The Y-STR

test cannot differentiate between Johnny and his sons. But Sorenson also conducted STR testing on the same sample, which is more comprehensive and informative, and it *excluded* Johnny as a possible contributor. (R.9024,15270.) Because Johnny is excluded as a contributor, the DNA observed in the Y-STR test must have come from one of Johnny's sons.

Johnny filed a motion to exclude the Y-STR testing, arguing it would confuse and mislead the jury, but the court denied the motion. The court ruled that "[t]he results of both of these tests [Y-STR and STR], if explained and reported accurately to the jury, are not substantially prejudicial to the Defendant—especially when reported together." (R.1711.)

The State nonetheless focused on the Y-STR test results, which could not exclude Johnny. Without mentioning the STR results excluding Johnny from the sample, Jeskie repeatedly testified that the Y-STR results showed the DNA "matched Johnny" and "[h]e was the minor... Y-STR profile." (R.9023-04,9074,9075.) Only on cross-examination did Jeskie acknowledge that the Y-STR results were not specific to Johnny, and the Wall sons were likewise included as possible contributors. (R.9075.)

Moreover, far from "report[ing] together" the results of the Y-STR and STR tests, the State's experts indicated it was *improper* to consider the tests together and infer anything about the Y-STR testing from the STR testing on the same sample. Jeskie testified the tests were "different chemistries" and Johnny "is not a

contributor to that STR mixture,” implying Johnny’s DNA might be contained in the Y-STR mixture but not the STR mixture—even though the two tests were done on the *same sample*. (R.9024,9078-79,9092.) Likewise, in the State’s case in rebuttal, Hellwig explicitly *disagreed* that Johnny’s exclusion on the STR test indicated the Wall DNA observed in the Y-STR test most likely came from one of Johnny’s sons. (R.9923.) Hellwig argued that it would be improper to infer this because the “STRs and Y-STRs are separate events....I won’t conclude that these two are linked, we treat these as separate entities.” (R.9923-24.)

In sum, the testimony was inaccurate, misleading, and confusing. It violates the requirement under *Jones* that Y-STR results must be presented in a fair and accurate manner in light of the limitations of Y-STR testing. [Jones, 2015 UT 19, ¶ 35](#). It also violated the court’s order that the results of the two tests should be fairly and accurately reported together. (R.1711.) In failing to object, defense counsel’s performance was deficient.

M-VAC of pillowcase (Item 25.1) and comforter (Item 13.4) - As discussed above, Johnny should have been excluded as a contributor to the M-VAC pillowcase sample because his alleles were not present at reliable levels. (R.5406,5420-21.) Based on unreliable activity that might have been equipment noise, Jeskie testified that Johnny was included as a “possible contributor[]” to this sample, along with Uta and Nils. (R.9025,9048.)

The State mischaracterized the inconclusive results for this sample as if they conclusively implicated Johnny. The prosecution stated:

Q. With regards to this profile, you found the defendant's STR DNA profile in that mixture on [the pillowcase]; is that correct?

A. Johnny Wall is included as a possible contributor to the mixture that we got from [the pillowcase].

Q. Making him unique to it as opposed to anyone else?

A. I'm not sure what you mean by that question.

Q. That profile...the STR profile is unique to him alone?

A. His...STR profile is unique to him alone.

Q. And it's found here in this mixture on [the pillowcase]?

A. He's included as a possible contributor to the mixture from [the pillowcase].

(R.9099.) Of course, Johnny's "unique" STR profile was *not* found in this sample – his alleles were not observed at reliable levels at four loci, meaning he was excluded. (R.9025,15275-77.)

But even if Johnny is included as a possible contributor to the M-VAC pillowcase sample, his children are likewise included as possible contributors. The same is true for the M-VAC of the comforter (Item 13.4), where Sorenson found a mixture of at least four contributors, including Uta, Johnny, Nils, the Wall children, and 1 in 20 Caucasians as possible contributors. (R.9020,9063-

64,9914.) But the State mischaracterized the results of both M-VAC samples as being unique to Johnny. (R.9020,9025.)

The State repeated its misrepresentation in closing when it urged the jury to convict based on Johnny's "unique" DNA profile:

There was DNA on the bedroom comforter in which the defendant was included as a possible contributor, and there was DNA on the bed pillow on Uta's bed on the white pillow case. *And the STR profile belonging to Johnny Wall is unique.*

(R.10140 (emphasis added).)

But the samples did not contain a profile "unique" to Johnny. Sorenson included both Johnny and Uta, so all of the children are likewise included as possible contributors. (R.9914.) Because the children together share all of Johnny's alleles, the test results show that his children had been in the home, not anything "unique" to Johnny. (R.9050-51,9060-61.)

Indeed, the DNA is most likely from Johnny's children, not Johnny. The children were in Uta's room and on her bed, and their clothes and bedding had been washed together, allowing their DNA mingled. (R.3036-37,9038,9248,14514-16,14524,14561-62.) Because this sample was collected by the M-VAC process, which collects old DNA deep in the fabric, it is very likely the mixture included DNA from all of the Wall children living in the home. (R.9018,9913.)

In closing, however, the State misrepresented the evidence and insisted the DNA must be from Johnny rather than the Wall children because:

[the DNA is] at a very pinpoint location. The very locations where this man had contact; the place where the gl[ov]e swipe was and the place where he took that pillow to suffocate her and get that bruise on the lip, right?

(R.10162 (emphasis added).) This is false and contrary to the testimony of the State's experts. These samples were collected by the M-VAC process, which gathers from deep layers in areas of the fabric, not from a pinpoint location.

(R.9018,9025.) Because the M-VAC process was used on the pillowcase and comforter, it is very likely that the mixtures collected accumulated DNA from the household members, including the children. But the State misrepresented the evidence to imply the DNA could not have come from the Wall children.

In sum, the testimony was confusing, misleading, and unfairly prejudicial, particularly where the State misrepresented the evidence to urge the jury to find that Johnny had been in Uta's home. In failing to object, defense counsel's performance was constitutionally deficient.

2.3.2 Trial Counsel's Failure to Object Was Prejudicial

The State relied heavily on the challenged DNA evidence at trial. But the testimony regarding the four challenged pieces of DNA evidence was unreliable, irrelevant, and unfairly prejudicial to Johnny. If the evidence had been excluded, or trial counsel had objected to the State's mischaracterizations, there is a reasonable likelihood Johnny would not have been convicted.

Evidentiary errors under rule 702 are prejudicial "if there is a reasonable likelihood" the verdict would have been different absent the error. *State v.*

Clopten, 2009 UT 84, ¶ 39, 223 P.3d 1103 (quotation simplified). The same standard applies for ineffective assistance of counsel: “but for counsel's deficient performance there is a reasonable probability that the outcome of the trial would have been different.” A reasonable probability exists when the errors undermine “confidence in the outcome.” *State v. Larrabee*, 2013 UT 70, ¶ 34, 321 P.3d 1136.

Here, the admission of the unreliable evidence and counsel’s failure to object to the State’s mischaracterizations undermine confidence in the verdict. The DNA evidence involved three experts, covering three days of trial, likely because the biggest hole in the State’s theory was the absence of evidence placing Johnny in Uta’s home. The State’s mischaracterizations of the DNA results are the only explanation of how the jury concluded Johnny was there. In closing, the state repeatedly referenced the DNA and mischaracterized the evidence.

The State referred to DNA at least six times in closing and twenty-two times in rebuttal. (R.10150,10182.) To overcome the medical examiner’s view that suicide and homicide were equally likely, the State pointed out that the medical examiner “didn’t know about all the DNA work.” (R.10159.) The State also referred to the DNA evidence when asserting that Johnny’s injuries, words, and actions showed that he killed Uta. (R.10142-43,10144-45,10163-66,10171,10179.) In the end, the mischaracterization of the DNA evidence is the only thing that placed Johnny at the scene. (R.10126,10140,10162-63.)

The DNA evidence was therefore central to the State's theory, and it was repeatedly mischaracterized by the State in closing. Below are some of the mischaracterizations the jury heard just before deliberations.

Despite the fact that the sample under Uta's fingernail showed only that it came from a male, the State told the jury: "I would submit to you that it was as if Uta was standing in this courtroom and pointing to the defendant as her killer." (R.10142.) As to the bedding, the State said that Johnny's DNA "was found there. In two spots it was found there." (R.10166.) With regard to the blood stain on the comforter the testing of which excluded Johnny, the State told the jury that "Defendant's unique DNA STR profile was found at that location." (R.10126.)

Even though the DNA extracted from the pillowcase and comforter was consistent with its coming from the children, the State told the jury in discussing that evidence: "the STR profile belonging to Johnny Wall is unique." (R.10140.) Despite the fact that the M-VAC does not collect from a pinpoint location, the State falsely told the jury that the DNA is "at a very pinpoint location. The very locations where this man had contact." (R.10162-63.) This is important because the State then told the jury that the DNA could not have come from the children "because you need to have all four children to be on that same spot," and then that "[t]hat's ridiculous. The more likely and the real and reasonable is that one person touched it, and it's that man right there." (R.10162-63.)

These statements were false. And trial counsel's deficient performance in allowing the State's mischaracterizations was prejudicial, as it was the only way the jury concluded that Johnny was in the home.

Absent the misleading characterizations of the DNA evidence, there is a reasonable likelihood of a different outcome. As this court has stated, "[j]ust as [courts] are more ready to view errors as harmless when confronted with overwhelming evidence of a defendant's guilt, [courts] are more willing to reverse [or grant a new trial] when a conviction is based on comparatively thin evidence." *State v. Charles*, 2011 UT App 291, ¶ 37 n.14, 263 P.3d 469. Where evidence is thin, "almost any error has the potential to be prejudicial." *Id.*

The evidence here was insufficient, and at best thin. The errors were therefore prejudicial. This court should order a new trial.

Conclusion

The court should vacate the verdict because it was based upon speculation. Alternatively, the court should order a new trial without the inadmissible DNA evidence or the State's mischaracterization of that evidence.

DATED this 28th day of June, 2018.

ZIMMERMAN BOOHER

/s/ Troy L. Booher
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Certificate of Compliance With Rule 24(f)(1)

I hereby certify that:

1. This brief complies with the word limits set forth in [Utah R. App. P. 24\(g\)\(1\)](#) because this brief contains 13,889 words, excluding the parts of the brief exempted by [Utah R. App. P. 24\(g\)\(2\)](#).

2. This brief complies with [Utah R. App. P. 21\(g\)](#) regarding public and non-public filings.

DATED this 28th day of June, 2018.

/s/ Troy L. Booher

Certificate of Service

This is to certify that on the 28th day of June, 2018, I caused two true and correct copies of the Brief of Appellant to be served via first-class mail, postage prepaid, with a copy by email, on:

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Addendum A



PENGAD 800-631-6889
STATE'S
EXHIBIT
44

Addendum B

A

FILED DISTRICT COURT
Third Judicial District

FEB - 9 2015

SALT LAKE COUNTY

Deputy Clerk

IN THE THIRD JUDICIAL DISTRICT COURT
IN AND FOR SALT LAKE COUNTY, STATE OF UTAH

STATE OF UTAH,

Plaintiff,

vs.

JOHNNY BRICKMAN WALL,

Defendant.

**MEMORANDUM DECISION AND
ORDER ON DEFENDANT'S MOTIONS
IN LIMINE RE: DNA EVIDENCE**

Case Number 131903972

Judge James T. Blanch

THE MATTER IS BEFORE THE COURT on several motions in limine regarding DNA evidence filed by Defendant: Motion in Limine (Lack of Statistical Evidence for DNA Test Results), which was filed on May 14, 2014; Motion in Limine (Analysis of the DNA Sample from the Pillowcase), which was filed on September 17, 2014; Motion in Limine: Inconclusive DNA Test Results, which was filed on September 17, 2014; and Motion in Limine: Low Template DNA Testing, which was filed on September 19, 2014.

The court held an evidentiary hearing on November 10, 2014, during which Dr. Elizabeth Johnson and Mr. Daniel Hellwig testified. Following the hearing, Defendant submitted three more motions, clarifying the outstanding issues in dispute: Motion in Limine (Sorenson Item 5.3), which was filed November 12, 2014; Motion in Limine (Sorenson Item 13.4), which was filed on November 12, 2014; and Motion in Limine (Inaccurate Statistical Evidence for DNA Mixtures), which was filed on November 12, 2014. The State filed a combined opposition to the motions on December 1, 2014, and Defendant filed a combined reply on December 29, 2014.

The court held oral arguments on January 6, 2015, during which the parties made clear they had narrowed the matters in dispute down to four issues: the admissibility of Sorenson Item

2.0, the admissibility of Sorenson Item 5.3, the admissibility of Sorenson Item 25.1, and the effect of Sorenson's failure to take into account kinship relations during the testing of the DNA.

At the hearing, the court orally ruled on the admissibility of Sorenson Items 2.0 and 5.3. In addition, the court orally ruled on the issues regarding kinship relations. The court indicated it would take the issue of the admissibility of Item 25.1 under advisement. The court also indicated it would issue a written ruling and order at a later time.

Following the oral argument, Defendant filed a supplemental memorandum on January 12, 2015, regarding the admissibility of Item 25.1. The State filed a supplemental memorandum in opposition on January 14, 2015. On January 23, 2015, the parties met for an evidentiary hearing on other matters, during which the court orally informed the parties of its ruling on Sorenson Item 25.1. The court again indicated it would issue a written decision at a later date.

The Court now enters its written Memorandum Decision and Order on the DNA issues.

1. Sorenson Item 2.0: Right Fingernail Clippings

At the preliminary hearing, the State's DNA expert, Ms. Jeskie, testified she performed a Y-STR test on .01 nanograms of DNA obtained from 3 male human cells found under the right fingernail of the alleged victim in the case. Because of the small sample of DNA available, Ms. Jeskie was only able to analyze the alleles on 5 loci in the sample, all of which matched the alleles in Defendant's sample. However, in order to make a reliable conclusion regarding whether a person is a possible contributor to a DNA sample, a DNA analyst must be able to extract and match data from at least 7 loci. Due to the low number of alleles in the sample, Ms. Jeskie concluded "no meaningful comparison" could be made to the Defendant's DNA or his lineage. Even so, Ms. Jeskie was able to exclude 9 individual males as possible contributors to

the sample. At the evidentiary hearing, the State's witness, Mr. Daniel Hellwig, explained and confirmed Ms. Jeskie's conclusions regarding Sorenson Item 2.0.

Defendant makes three challenges to this evidence: First, the evidence should be excluded under rule 702 because the test sample was too small to analyze properly. Second, the evidence should be excluded under rules 702 and 403 because Ms. Jeskie's conclusion regarding the evidence is inaccurate. Third, the evidence should be excluded under rules 401 and 403 because it is not relevant and the prejudicial effect substantially outweighs its probative value.

a. Sample Size

Defendant first moves to exclude the DNA results obtained from the alleged victim's right fingernail clippings under rule 702 because the sample used was too small to obtain a reliable inclusionary result. Specifically, Defendant challenges the evidence because there is too little data to create a statistical probability that the DNA belongs to Defendant. In addition, Defendant contends some of the alleles may have dropped out of the sample, which he argues makes it more difficult to exclude individuals as possible contributors and makes any conclusion about the evidence unreliable.

Under Rule 702, "the trial court performs an important gatekeeping function, intended to ensure that only reliable expert testimony will be presented to the jury." *Gunn Hill Dairy Properties, LLC v. Los Angeles Dept. of Water & Power*, 2012 UT App 20, ¶ 31. In order to perform this gatekeeping function, the court must make several determinations: First, the court must determine whether the proposed witness is qualified to testify as an expert due to his or her "knowledge, skill, experience, training, or education" and whether the testimony being offered will "assist the trier of fact to understand the evidence or to determine a fact in issue." Second, the court must determine whether the testimony meets a "threshold showing" of reliability. Utah

R. Evid. 702. A party may make a threshold showing that expert testimony is reliable in one of two ways: First, a party may show that the “principles or methods underlying the testimony . . . (i) are reliable, (ii) are based upon sufficient facts or data, and (iii) have been reliably applied to the facts of the case.” Utah R. Evid. 702(b). Second, a party may show that the underlying principles or methods “are generally accepted by the relevant expert community.” *Id.* Importantly, this threshold showing “marks only the *beginning* of a reliability determination. It is up to the trier of fact to determine the ultimate reliability of the evidence.” *Gunn Hill*, 2012 UT App 20, ¶ 33; *see also State v. Jones*, 2015 UT 19, ¶ 26 (“[Courts] must be careful not to displace the province of the factfinder to weigh the evidence.”).

First, no challenge has been made to Ms. Jeskie’s qualifications as an expert in this case, and the court finds that based upon her experience and training, Ms. Jeskie is qualified under rule 702(a) to testify as an expert regarding DNA analysis. Ms. Jeskie has a bachelor’s of science degree in molecular biology and has worked as a forensic DNA analyst for over twelve years. She is currently a lead forensic DNA analyst at Sorenson Forensics.

In addition, no challenge has been made to Mr. Hellwig’s qualifications to testify as an expert on DNA analysis. Mr. Hellwig has a bachelor’s degree in biology and chemistry and a master’s degree in forensic science. He has been either teaching forensic science or working as a DNA forensic analyst since 2002 and is currently the lab director of Sorenson Forensics Laboratory. Based upon Mr. Hellwig’s training and experience, the court concludes he is qualified under rule 702(a) to testify as an expert regarding DNA analysis.

Second, the court finds the testimony will help the jury determine a fact at issue in this case. The evidence shows low-level male DNA was found under the alleged victim’s fingernails, indicating the alleged victim had contact with a male at a time close to her death. Although the

sample size was too small to produce any inclusionary data, the State was able to use the DNA to exclude nine individual males as possible contributors who may have had contact with the alleged victim's body before or after her death. This evidence may help the jury determine whether a male individual played a role in the alleged victim's death, as opposed to the death being a suicide or accident, as posited by Defendant. Further, the evidence may also help the jury decide whether various male individuals who had relevant contact with the alleged victim or her body can be excluded as having played a role in her death.

Finally, the evidence meets the requirements of rule 702(c) because the methodology used to analyze the DNA, including the sufficiency of facts or data and their manner of application to the facts of the case, are generally accepted by the relevant expert community. Importantly, Defendant has not challenged the underlying scientific methodology by which Sorenson performed the Y-STR testing and analyzed the DNA, and the court concludes Sorensen's methodology meets the requirements of rule 702. Sorenson has been accredited by at least two accrediting institutions and follows the guidelines implemented by the Scientific Working Group on DNA Analysis Methods (SWGDM), a nationally recognized organization and authority on forensic DNA analysis.

In addition, the validity and admissibility of Y-STR test results used for exclusionary purposes has been upheld by our Utah Supreme Court and other courts. *See State v. Maestas*, 2012 UT 46, ¶ 132 ("In this jurisdiction, we have previously stated that analysis serving to exclude particular individuals can be inherently reliable."). Indeed, our Utah Supreme Court has recently reaffirmed that "scientific and forensic journals as well as other courts have recognized Y-STR DNA testing as reliable for excluding individuals as the source of an unknown sample." *State v. Jones*, 2015 UT 19, ¶ 27.

Moreover, Defendant's own expert, Dr. Johnson, testified at the evidentiary hearing on the DNA motions that each of the alleles in the sample was above the analytic threshold for Y-STR testing¹ and that this amount of DNA, although small, is suitable to test for exclusionary purposes—the purposes for which the State intends to introduce the evidence.

b. Inaccurate Conclusion

Second, Defendant moves to exclude Ms. Jeskie's conclusion that Defendant's DNA profile was "not excluded" from the sample. Defendant's motion is made pursuant to both rule 702 and rule 403 of the Utah Rules of Evidence.

The court agrees the State's witness should not be allowed to indicate Defendant's DNA profile was "not excluded" from the sample without further explanation. Both the State's and Defendant's witnesses testified at the evidentiary hearing that the phrase "not excluded" necessarily implies a DNA sample is included, which does not accurately reflect the test results. Therefore, the testimony, without further explanation, is unreliable under rule 702 and significantly prejudicial under rule 403 because it may be misleading and confusing to the jury.

However, the court concludes that Ms. Jeskie may testify "no meaningful comparison" could be made to the Defendant's sample or his lineage as long as she explains the meaning of "no meaningful comparison." According to both parties' experts who testified at the evidentiary hearing on the DNA motions, "no meaningful comparison" means Defendant could not be excluded or included as a possible contributor to the sample. The court cautions the State to ensure its expert provides neutral testimony on this subject so as not to encourage the jury to draw an improper inference from the evidence. If the questioning of the witness and her answers raise concerns for the court or the parties, in order to cure the prejudicial effect of the testimony, the court may consider offering an instruction to the jury that the DNA test results for Item 2.0

¹ No stochastic threshold exists for Y-STR testing.

may only be used for exclusionary purposes and the jury is not to use the test results as evidence of Defendant's guilt.

Finally, the State's witness may explain the process of degradation of a DNA sample and the possible contributing factors that may have affected this particular sample of DNA. This testimony is admissible pursuant to rule 702(c) because it is generally accepted in the relevant expert community.

c. Relevance

Third, Defendant challenges the admissibility of the evidence under rules 401 and 403 because the conclusion "no meaningful comparison" is a meaningless conclusion and is not probative of Defendant's guilt. In addition, Defendant contends unless there is some other evidence any of the nine excluded individuals had contact with the alleged victim's fingernails, then the conclusion they were excluded from the sample is not relevant. Finally, Defendant contends the jury is likely to draw a negative inference from the evidence; therefore, the minimal probative value of the evidence is substantially outweighed by the danger of unfair prejudice.

The court concludes the evidence is admissible under rules 401 and 403 because it is relevant and the probative value of the evidence is not substantially outweighed by the danger of unfair prejudice. As explained above, the male DNA under the alleged victim's fingernail shows the alleged victim had contact with a male individual sometime prior to her death. This is particularly relevant in connection with the State's evidence that on the day the alleged victim died, Defendant had a scratch on his face consistent with a human nail and made inconsistent statements regarding the scratch.

In addition, the evidence is relevant to show the police conducted a thorough investigation of the crime scene and were able to exclude nine potential contributors to the

sample. Seven of the nine individuals excluded by the State either had contact with the alleged victim's body after her death or were close enough in proximity to her body after her death that they may have had contact. The remaining two individuals, Nils Abramson and Jack Skalicky, were both potential suspects in the investigation at some point. Mr. Abramson was the alleged victim's boyfriend, and Mr. Skalicky stood to inherit the alleged victim's home as part of her will. In addition, as part of the police investigation, the police compared the DNA sample to Defendant's DNA and his lineage, and the court concludes the State is allowed to present those results to the jury.

Although Defendant's concern that the jury may infer the test results indicate the DNA belongs to the Defendant is well-taken, the court concludes the potential inference is not unfairly prejudicial and does not outweigh the evidence's probative value. As explained by the Utah Supreme Court, "where expert testimony is presented accurately and where the evidence's scientific limitations are properly described to the jury, . . . the testimony is [not] unfairly prejudicial to the defendant or likely to confuse the jury." *Jones*, 2015 UT 19, ¶ 30. However, our Supreme Court has also cautioned prosecutors to "properly and accurately present Y-STR DNA evidence" due to its persuasive value in the eyes of the jury. *Id.* ¶ 34. Therefore, as indicated above, if the State or its witnesses encourage the inference that Defendant is included as a possible contributor to sample 2.0 based upon the test results, the court will consider offering a curative instruction to the jury.

Accordingly, the court DENIES Defendant's motion to exclude evidence of Sorenson Item 2.0.

2. Sorenson Item 5.3: Red Brown Stains on White Pillow

According to the testimony presented at the evidentiary hearing, Sorenson Forensics conducted both a Y-STR and STR test on the red brown stains found on the alleged victim's pillow. Mr. Hellwig testified that because there was "too much female DNA that was – in comparison to the male DNA," his lab performed the Y-STR testing first. *See Evid. Hr'g Trans.* at 193-94, 199, 222. The Y-STR came back with both a major and a minor profile. The major profile matched the victim's boyfriend and his paternal line. The minor profile matched the Defendant's sample and his paternal line. The STR testing came back with a mixture of at least three contributors to the sample, with the victim's sample matching the major profile. The victim's boyfriend matched one of the minor profiles. Both Liam and Pelle Wall, the Defendant's sons, were not excluded as contributors to the sample; however, the Defendant was excluded as a possible contributor to the sample.

Defendant alleges the test results of Item 5.3 are not relevant and are prejudicial to him. He contends that because the STR testing "conclusively" excluded Defendant, *see Dr. Johnson's Testimony, Hr'g. Trans.*, at 144, and because the STR test did *not* exclude Defendant's sons, then the results of the Y-STR must refer only to Defendant's sons and not to Defendant himself. Defendant asserts this information will mislead and confuse the jury if both test results are presented.

In opposition, the State argues Defendant's profile was excluded by the STR testing "because his alleles were not all present at the threshold levels." *State's Memo. Opp.* at 14. Furthermore, the State contends the major sample in the STR "can and did overwhelm the minor male profiles." *State's Memo. in Opp.* at 15. Therefore, according to the State, there is a reasonable explanation for the exclusion of the Defendant by the STR but the inclusion of the

Defendant by the Y-STR. Furthermore, the State argues the evidence is relevant for historical purposes to show the extent of the police investigation and the results of the DNA testing.

The court concludes the test results from both the STR and the Y-STR testing are relevant under rule 401. The results show there were red spots that could be blood found at the crime scene and the investigators tested the sample to determine its source. The testing shows the blood belonged to the alleged victim and at least two other males contributed to the sample – indicating there were at least two other males present at the crime scene. One of those males was the alleged victim’s boyfriend. The other is somebody in the Defendant’s paternal line. The results also show the police did a thorough investigation of the crime scene.

The court also concludes the evidence is not unfairly prejudicial under rule 403. The test results show Defendant was excluded by the STR testing but his paternal lineage was not excluded by the Y-STR testing. Mr. Hellwig concluded “it was not an incorrect statement to exclude from the . . . profile that was developed from the autosomal STRs and not exclude from the profile that was developed from the Y-STRs . . . [b]ecause they are different amplifications of the same sample.” Evid. Hr’g Trans. at 222. The results of both of these tests, if explained and reported accurately to the jury, are not substantially prejudicial to the Defendant—especially when reported together. Defendant will have an opportunity to cross-examine the witnesses and expose any limitations of the Y-STR testing. *See State v. Jones*, 2015 UT 19, ¶ 33 (“[A]ny risk of confusion or unfair prejudice are minimized where . . . the jury hears testimony from the experts of the various limitations of Y-STR DNA.”). In addition, Defendant will also be able to argue the significance of both test results during his closing argument.

Accordingly, the court DENIES Defendant’s motion to exclude evidence of Sorenson Item 5.3.

3. Sorenson Item 25.1: Pillowcase

Using the M-Vac process, Sorenson collected data from the white pillowcase surrounding the red stains analyzed as Item 5.3. Sorenson obtained a mixture of at least three individuals from the sample. After performing two amplifications on the sample, Sorenson determined the alleged victim, her boyfriend, and Defendant were all included as possible contributors with statistical probabilities.

Defendant makes two challenges to the evidence: first, Defendant should be excluded as a possible contributor because, according to Defendant, some of his alleles were missing from the sample; and second, the statistical probability calculated by Sorenson is unreliable because Sorenson used alleles with peaks below the stochastic threshold.

a. Missing Alleles

Exhibit 15, the electropherogram, and exhibit 16, the allele chart, show that at four separate loci, four of Defendant's alleles do not show up in the State's sample; namely, D8 does not contain a 17 allele; D7 does not contain a 10 allele; D2 does not contain a 25 allele, and FGA does not contain a 26 allele. Even though four of Defendant's alleles did not show up in the sample, Sorenson Forensics did not exclude Defendant as a possible contributor. Defendant contends that because the data indicates the sample is missing four of Defendant's alleles, Sorenson's conclusion is unreliable and does not meet the requirements of rule 702.

Sorenson performed two amplifications on sample 25.1. Each amplification included a 10-second injection. According to Sorenson's policy, the analytic threshold for the 10-second injection is 50 RFUs. Mr. Hellwig explained that in both amplifications of the sample, locus D8, locus D7, and locus D2 each had "questionable activity" below the analytic threshold at the points where Defendant's alleles should have been if he were a possible contributor. At locus

D8, a 17 allele appears at 26 RFU in the first amplification and at 43 RFU in the second amplification. At locus D7, a 10 allele appears at 43 RFU in the first amplification and at 41 RFU in the second amplification. At locus D2, a 25 allele appears at 32 RFU in the second amplification.

According to Mr. Hellwig, this questionable activity is indicated by an asterisk on the allele chart. The asterisk indicates that the results at these loci are “inconclusive for the presence of additional alleles.” Although Mr. Hellwig’s confidence is low that the activity below the analytic threshold indicates actual DNA, Sorenson’s policy is not to disregard it.² Rather, because it is possible these loci could contain a 17 allele, a 10 allele, and a 25 allele, Sorenson did not use the loci to exclude the Defendant as a possible contributor to the sample. Mr. Hellwig also explained that many labs that he has visited and the Utah State Crime Lab similarly use an asterisk to indicate inconclusive data. Therefore, according to Mr. Hellwig, it was appropriate to include Defendant as a possible contributor to the DNA sample despite the fact that these three alleles are missing on the allele chart.

With regard to the FGA locus, Mr. Hellwig testified that item 25.1 was subjected to two amplifications. The first amplification was deemed inconclusive, and Sorenson used the second amplification for its report. The second amplification process did not show a 26 allele on the FGA locus. However, the first amplification *did* contain a 26 allele above the analytic threshold at 62 RFU. Mr. Hellwig explained that the presence of a 26 allele in the first amplification and its absence in the second amplification is a classic example of allelic dropout. Although the data was not used for statistical purposes, Mr. Hellwig explained his lab still used the data to determine whether Defendant is a possible contributor to the sample.

² Because of the low confidence in the data’s reliability, Sorenson did not use this data for statistical purposes.

Dr. Johnson, Defendant's expert, contends any one of these missing alleles means Defendant must be excluded as a possible contributor to the sample. She explained that any data below the analytic threshold is unreliable and must be completely disregarded. She also explained that because Sorenson labeled the first amplification as "inconclusive," it was inappropriate for Sorenson to use the data collected at the FGA locus from the first amplification to include Defendant as a possible contributor to the sample.

The testimony from the hearing is unclear whether relying on data below the analytic threshold and in inconclusive reports is generally accepted within the relevant expert community. Mr. Hellwig referenced other labs, including the Utah State Crime Lab, and indicated other labs use asterisks to indicate inconclusive data; however, he did not indicate whether other labs use this data for inclusionary purposes. Therefore, the court will analyze this practice under rule 702(b) rather than rule 702(c).

Rule 702(b) requires a threshold showing that the "principles or methods underlying the testimony . . . (i) are reliable, (ii) are based upon sufficient facts or data, and (iii) have been reliably applied to the facts of the case." Utah R. Evid. 702(b). Importantly, this threshold showing "marks only the *beginning* of a reliability determination. It is up to the trier of fact to determine the ultimate reliability of the evidence." *Gunn Hill*, 2012 UT App 20, ¶ 33.

After reviewing the testimony and evidence presented at the evidentiary hearing, the court concludes the State has made a threshold showing of reliability with regard to this data and Ms. Jeskie's conclusion that Defendant is not excluded as a possible contributor to the sample. Mr. Hellwig and Dr. Johnson disagree regarding the effect of the analytic threshold and the value of using data from two amplification processes. Both experts have reasonable interpretations and applications of the data, and it is not the court's role to decide which expert is correct. Mere

disagreement among experts does not make the testimony unreliable. *See Eskelson ex rel. Eskelson v. Davis Hosp. & Med. Ctr.*, 2010 UT 59, ¶ 12 (“[T]he degree of scrutiny [that should be applied to expert testimony by trial judges] is not so rigorous as to be satisfied only by scientific or other specialized principles or methods that are free of controversy or that meet any fixed set of criteria fashioned to test reliability.” (quoting Utah R. Evid. 702 advisory committee notes, ¶ 3)). Defendant’s objection to this evidence is a matter of weight rather than reliability, and Defendant will be able to thoroughly cross-examine Ms. Jeskie and/or Mr. Hellwig regarding the use of the data in the determination.

b. Peaks Below the Stochastic Threshold

As referenced above, Sorenson performed a 10-second injection amplification on Item 25.1. By policy, Sorenson’s stochastic threshold for a 10-second injection is 150 RFU. Because Sorenson received several results below the 150 RFU, it performed a second amplification on the item, which it calls “a confirmatory amplification.” Mr. Hellwig explained that Sorenson’s policy is if it sees the same data repeated in a confirmatory amplification—even if the data is below the stochastic threshold—then it considers the data sufficiently reliable to use for statistical purposes.

Exhibit 15 shows that Sorenson used data below the stochastic threshold for four separate loci: CSF, TH01, D13, and D19. Locus CSF exhibits a 13 allele at 17 RFU in the first amplification and at 59 RFU in the second amplification. Locus TH01 exhibits a 7 allele at 47 RFU and at 63 RFU. Locus D13 exhibits a 14 allele at 57 RFU and at 64 RFU. Locus D19 exhibits a 15 allele at 78 RFU and at 53 RFU.

Using each of these alleles, Dr. Jeskie calculated a statistical probability the DNA belongs to Defendant at 1 in 8,340 Caucasians. After Defendant challenged Sorenson’s

calculation, Sorenson re-calculated the statistical probability two more times using two more sets of data. First, Sorenson disregarded each of the four disputed alleles and calculated the statistical probability at 1 in 453 Caucasians.

Second, Sorenson disregarded the 13 allele at locus CSF and the 7 allele at locus TH01 because the confirmatory amplifications resulted in data below the analytic threshold, not just below the stochastic threshold. Sorenson included the 14 allele at locus D13 and the 15 allele at locus D19 because both amplifications resulted in RFUs above the analytic threshold. Based upon this data, Sorenson calculated a statistical probability of 1 in 2.51 thousand for Caucasians. *See Declaration of Daniel S. Hellwig, filed January 15, 2015.*

Dr. Johnson testified that standard practice is to disregard any data found below the stochastic threshold for purposes of a statistical analysis. This is because the stochastic threshold is the point at which a lab technician can be confident there has been no allelic dropout. According to Dr. Johnson, because of the danger of allelic dropout, using data below the stochastic threshold may make the statistical analysis unreliable. Therefore, according to Defendant, Sorenson miscalculated the statistical probability the DNA belongs to Defendant to the prejudice of Defendant.

In response, Mr. Hellwig testified that with regard to multiple amplifications, SWGDAM merely requires labs to have a policy with regard to how the data will be used. He explained it would be an unreasonable occurrence for the same alleles to drop out at the same loci during two amplification processes. Therefore, he has confidence the appearance of repeated peaks during a confirmatory amplification process makes the data sufficiently reliable for statistical purposes. He explained Sorenson's policy has been subject to assessment by at least two separate auditing companies. In addition, the policy was put in place by his predecessor and has been used by

Sorenson for quite some time. Even so, he is unaware of any scholarly articles, peer review, or third party testing of Sorenson's policy regarding its use of confirmatory amplifications.

Because the State presented no evidence that Sorenson's confirmatory amplification process is generally accepted in the relevant expert community, the evidence must meet the requirements of rule 702(b), which requires the State to make a threshold showing that the "principles or methods underlying the testimony . . . (i) are reliable, (ii) are based upon sufficient facts or data, and (iii) have been reliably applied to the facts of the case." Utah R. Evid. 702(b). Importantly, this threshold showing "marks only the *beginning* of a reliability determination. It is up to the trier of fact to determine the ultimate reliability of the evidence." *Gunn Hill*, 2012 UT App 20, ¶ 33.

The State has made a threshold showing of reliability regarding this testimony. SWGDAM requires labs to have a policy regarding multiple amplification processes, which Sorenson has in place. The lab only uses data for statistical purposes that have been subject to confirmation through a repeat process. The lab's analysts review the data personally. Furthermore, the lab's policy has been subjected to third party assessment and has been approved by auditing companies and at least one previous director of the lab. Although Dr. Johnson disapproves of the practice, the testimony is sufficiently reliable to be presented to the jury under rule 702.

Furthermore, Sorenson re-calculated the data two additional times using two different sets of data in order to account for Dr. Johnson's objections. At trial, the Defendant may present the alternative statistical probabilities to the jury. Any challenge to these statistical calculations and results are matters for the jury to weigh at trial. See *United States v. McCluskey*, 954 F.Supp.2d 1224, 1267 (2013). Defendant may elucidate any problems with the statistics during

cross-examination of the State's witnesses or during its own case-in-chief, and the jury may weigh the relevance of both sides' positions with respect to this evidence.

Accordingly, Defendant's motion to exclude Item 25.1 is DENIED.

4. Kinship: Sorenson Items 25.1, 5.3, and 13.4

Finally, Defendant contends the statistical calculations that were made when Defendant was found to be a possible contributor to Sorenson Items 25.1, 5.3, and 13.4 are inaccurate because Sorenson failed to take into account the kinship relations Defendant has with other possible contributors to the samples—his children. At the hearing, both Mr. Hellwig and Dr. Johnson testified that taking kinship into account would make the statistical results more favorable for Defendant. However, Mr. Hellwig explained Sorenson does not have the capability of taking kinship factors into account in conducting its statistical analysis. In addition, Dr. Johnson testified that although there are programs that take kinship relations into account, they are not standard in the relevant expert community. Hr'g. Trans. at 49.

The court concludes the methods used by Sorenson Forensics and the results of the DNA testing meet the threshold requirements of rule 702 and are sufficiently probative under rules 401 and 403. Sorenson conducted DNA testing using a random sample of possible contributors and created a statistical probability based upon this sample. As explained elsewhere in this ruling, the results of this testing meet the requirements of rule 702(c) and are relevant to show a baseline probability that a specific individual contributed to the sample. Any challenge to these statistical calculations and results are matters of weight and not of admissibility of the evidence. *See United States v. McCluskey*, 954 F.Supp.2d 1224, 1267 (2013); *cf. State v. Jones*, 2015 UT 19, ¶ 28 (“[S]tatistical conclusions . . . go to the weight of the testimony and not to the underlying scientific reliability.”). Defendant may elucidate any problems with the statistics during cross-

examination of the State's witness or during its own case-in-chief, and the jury may weigh the relevance of both sides' positions with respect to this evidence.

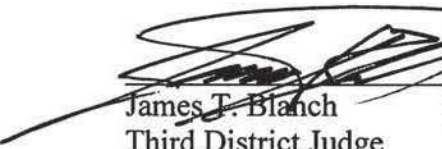
Accordingly, the Court DENIES Defendant's motions to exclude the statistical results of the testing performed on items 5.3, 13.4, and 25.1.


This Memorandum Decision and Order completes the court's disposition of the matters addressed herein. No further order is required from the parties under rule 7(f)(2) of the Utah Rules of Civil Procedure.

IT IS SO ORDERED.

DATED this 9th day of February, 2015.

BY THE COURT:


James T. Blanch
Third District Judge

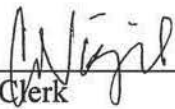


CERTIFICATE OF DELIVERY

I certify that a true and correct copy of the foregoing **Memorandum Decision and Order on Defendant's Motions in Limine Re: DNA Evidence** was either emailed, mailed, faxed, or hand-delivered on the 9 day of February, 2015 to the following:

Matthew B. Janzen
Anna L. Rossi
Nicholas D'alesandro
Salt Lake County District Attorney's Office
111 East Broadway, Suite 400
Salt Lake City, Utah 84111

G. Fred Metos
Jeremy Delicino
Attorneys for Defendant
10 West Broadway, Suite 650
Salt Lake City, Utah 84101



Deputy Clerk

Addendum C

3RD DISTRICT COURT - SALT LAKE
SALT LAKE COUNTY, STATE OF UTAH

STATE OF UTAH, : MINUTES
Plaintiff, : MOTION HEARING/SENTENCING
: SENTENCE, JUDGMENT, COMMITMENT
:
vs. : Case No: 131903972 FS
JOHNNY BRICKMAN WALL, : Judge: JAMES BLANCH
Defendant. : Date: July 8, 2015
Custody: Salt Lake County Jail

PRESENT

Clerk: cyndiab

Reporter: BRAD YOUNG

Prosecutor: MATTHEW B JANZEN

NICHOLAS M DALESANDRO

ANNA L ROSSI

Defendant

Defendant's Attorney(s): G FRED METOS

JEREMY M DELICINO

DEFENDANT INFORMATION

Date of birth: November 30, 1963

Sheriff Office#: 366004

CAT/CIC

Tape Number: CR S41 Tape Count: 2:06-3:48

CHARGES

1. MURDER - 1st Degree Felony

Plea: Not Guilty - Disposition: 03/12/2015 Guilty

HEARING

This matter is before the Court for oral arguments on the Defendant's Motions for Arrest of Judgment.

2:07 PM Mr. Metos argues the Motion for Arrest of Judgment re: Evidence Does Not Constitute the Offense.

2:34 PM Mr. Janzen responds.

2:50 PM Mr. Metos' rebuttal argument.

2:59 PM The Court states its ruling on the record. The Court DENIES the Defendant's

Motion to Arrest Judgment.

3:03 PM Mr. Metos argues the Motion for Arrest of Judgment re: Y-STR DNA Test Results.

3:06 PM Mr. Janzen responds.

3:17 PM Mr. Metos' rebuttal argument.

3:18 PM The Court states its ruling on the record. The Court DENIES the Defendant's Motion to Arrest Judgment.

3:25 PM Based on the denial of the motions, the Court proceeds with sentencing.

3:26 PM The Court addresses the requested corrections to the Pre-sentence Report.

3:30 PM The Court will accept the requested corrections and orders AP&P to correct the report, as stated on the record. Mr. Metos to prepare the appropriate order for the Court's signature.

3:34 PM Mr. Metos addresses the sentencing recommendation.

3:36 PM Pelle Wall addresses the Court.

3:42 PM Mr. Janzen addresses the sentencing recommendation.

3:44 PM Dr. Wall addresses the Court.

3:46 PM The Court imposes sentence at this time.

SENTENCE PRISON

Based on the defendant's conviction of MURDER a 1st Degree Felony, the defendant is sentenced to an indeterminate term of not less than fifteen years and which may be life in the Utah State Prison.

To the SALT LAKE County Sheriff: The defendant is remanded to your custody for transportation to the Utah State Prison where the defendant will be confined.

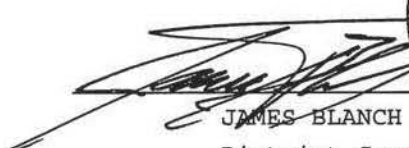
SENTENCE RECOMMENDATION NOTE

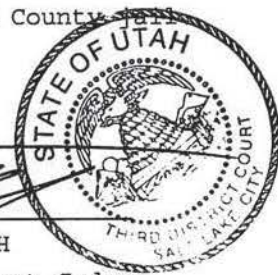
Restitution left open for the Court's determination, upon motion of the State.

CUSTODY

The defendant is present in the custody of the Salt Lake County Jail.

Date: 7/8/15


JAMES BLANCH
District Court Judge



Addendum D



SIM GILL, Bar No. 6389
District Attorney for Salt Lake County
MATTHEW B. JANZEN, Bar No. 8219
ANNA L. ROSSI, Bar No. 14099
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IN THE THIRD DISTRICT COURT, SALT LAKE DEPARTMENT
IN AND FOR THE COUNTY OF SALT LAKE, STATE OF UTAH

STATE OF UTAH,
Plaintiff,

vs.

JOHNNY BRICKMAN WALL,
Defendant.

**ORDER DENYING MOTION FOR
ARREST OF JUDGMENT (EVIDENCE
NOT CONSTITUTE OFFENSE)**

Case No. 131903972

Honorable James T. Blanch

WHEREAS, on March 12, 2015, Defendant was found guilty of Murder by a jury of his peers; and
WHEREAS, on May 26, 2015, Defendant filed a Motion and Memorandum for Arrest of Judgment
(Evidence not Constitute Offense); on June 24, 2015, the State file its Memorandum in Opposition;
and on July 6, 2015, Defendant filed his Reply; and

WHEREAS, on July 8, 2015 oral argument was held were this Court carefully analyzed and
articulated findings of fact and conclusions of law orally;

NOW THEREFORE, this Court hereby incorporates those oral findings of fact and

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conclusions of law as part of this ruling and further expresses the following written rulings:

1. Defendant's Motion for Arrest of Judgment (Evidence not Constitute Offense) is denied.
2. There was a large quantum of evidence, including expert testimony, that the jury considered over this 4 week trial (13 days in total). When the totality of the evidence is viewed in the light most favorable to the jury verdict, the evidence is not inconclusive or inherently improbable such that reasonable minds must have entertained a reasonable doubt. The evidence entitled the jury to reach a reasonable conclusion beyond a reasonable doubt that a homicide occurred and this Defendant committed it.
3. The court need not disregard evidence implicating Defendant as the perpetrator of the offense charged when assessing whether there was sufficient evidence to support the jury's conclusion that the victim was murdered, rather than committed suicide. There is not a hermetic division between the question of whether or not this was a homicide and the question of whether or not Defendant was the individual who committed the homicide. The jury was permitted to consider evidence that the Defendant was the perpetrator of the crime charged in deciding whether the death at issue in this case was a murder or a suicide. The court rejects Defendant's contention that the court must ignore evidence implicating Defendant as the guilty party when initially assessing whether there was sufficient evidence to establish that the victim was murdered rather than committed suicide.
4. Strong circumstantial evidence was presented at trial of motive, opportunity, inexplicable injuries to Defendant, Defendant's behaviors before and after the incident, and the changing of his story between what he told the police versus what he said in his deposition.
5. There were several expert witnesses who testified about the manner in which the Alprazolam

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was introduced into the victim that the jury was entitled to find credible and believe. There was also expert and fact testimony concerning blood evidence at the scene of the crime, the nature of the victim's injuries, and other aspects of the facts and circumstances of the victim's death to permit the jury to conclude that she was murdered and that Defendant was the one who committed the murder. In light of the all of the above, and in light of the entirety of the record in this case, ample evidence was submitted to jury to support its verdict of guilty.

Approved as to form:

/s/ G. Fred Metos USB#2250

Attorney for Defendant

Signed by Matthew B. Janzen with permission of G. Fred Metos

—ELECTRONIC SIGNATURE AT TOP OF THE DOCUMENT—

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Addendum E

West's Utah Code Annotated
 State Court Rules
 Utah Rules of Evidence (Refs & Annos)
 Article VII. Opinions and Expert Testimony

Utah Rules of Evidence, Rule 702

RULE 702. TESTIMONY BY EXPERTS

Currentness

(a) Subject to the limitations in paragraph (b), a witness who is qualified as an expert by knowledge, skill, experience, training, or education may 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.

(b) Scientific, technical, or other specialized knowledge may serve as the basis for expert testimony only if there is a threshold showing that the principles or methods that are underlying in the testimony

(1) are reliable,

(2) are based upon sufficient facts or data, and

(3) have been reliably applied to the facts.

(c) The threshold showing required by paragraph (b) is satisfied if the underlying principles or methods, including the sufficiency of facts or data and the manner of their application to the facts of the case, are generally accepted by the relevant expert community.

Credits

[Amended effective November 1, 2007; December 1, 2011.]

Editors' Notes

2011 ADVISORY COMMITTEE NOTE

The language of this rule has been amended as part of the restyling of the Evidence Rules to make them more easily understood and to make style and terminology consistent throughout the rules. These changes are intended to be stylistic only. There is no intent to change any result in any ruling on evidence admissibility.

ADVISORY COMMITTEE NOTES

Apart from its introductory clause, part (a) of the amended Rule recites verbatim Federal Rule 702 as it appeared before it was amended in 2000 to respond to [Daubert v. Merrell Dow Pharmaceuticals, Inc.](#), 509 U.S. 579 (1993). The 2007 amendment to the Rule added that introductory clause, along with parts (b) and (c). Unlike its predecessor, the

amended rule does not incorporate the text of the Federal Rule. Although Utah law foreshadowed in many respects the developments in federal law that commenced with *Daubert*, the 2007 amendment preserves and clarifies differences between the Utah and federal approaches to expert testimony.

The amended rule embodies several general considerations. First, the rule is intended to be applied to all expert testimony. In this respect, the rule follows federal law as announced in *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). Next, like its federal counterpart, Utah's rule assigns to trial judges a "gatekeeper" responsibility to screen out unreliable expert testimony. In performing their gatekeeper function, trial judges should confront proposed expert testimony with rational skepticism. This degree of scrutiny is not so rigorous as to be satisfied only by scientific or other specialized principles or methods that are free of controversy or that meet any fixed set of criteria fashioned to test reliability. The rational skeptic is receptive to any plausible evidence that may bear on reliability. She is mindful that several principles, methods or techniques may be suitably reliable to merit admission into evidence for consideration by the trier of fact. The fields of knowledge which may be drawn upon are not limited merely to the "scientific" and "technical", but extend to all "specialized" knowledge. Similarly, the expert is viewed, not in a narrow sense, but as a person qualified by "knowledge, skill, experience, training or education". Finally, the gatekeeping trial judge must take care to direct her skepticism to the particular proposition that the expert testimony is offered to support. The *Daubert* court characterized this task as focusing on the "work at hand". The practitioner should equally take care that the proffered expert testimony reliably addresses the "work at hand", and that the foundation of reliability presented for it reflects that consideration.

Section (c) retains limited features of the traditional *Frye* test for expert testimony. Generally accepted principles and methods may be admitted based on judicial notice. The nature of the "work at hand" is especially important here. It might be important in some cases for an expert to educate the factfinder about general principles, without attempting to apply these principles to the specific facts of the case. The rule recognizes that an expert on the stand may give a dissertation or exposition of principles relevant to the case, leaving the trier of fact to apply them to the facts. Proposed expert testimony that seeks to set out relevant principles, methods or techniques without offering an opinion about how they should be applied to a particular array of facts will be, in most instances, more eligible for admission under section (c) than case specific opinion testimony. There are, however, scientific or specialized methods or techniques applied at a level of considerable operational detail that have acquired sufficient general acceptance to merit admission under section (c).

The concept of general acceptance as used in section (c) is intended to replace the novel vs. non-novel dichotomy that has served as a central analytical tool in Utah's Rule 702 jurisprudence. The failure to show general acceptance meriting admission under section (c) does not mean the evidence is inadmissible, only that the threshold showing for reliability under section (b) must be shown by other means.

Section (b) adopts the three general categories of inquiry for expert testimony contained in the federal rule. Unlike the federal rule, however, the Utah rule notes that the proponent of the testimony is required to make only a "threshold" showing. That "threshold" requires only a basic foundational showing of indicia of reliability for the testimony to be admissible, not that the opinion is indisputably correct. When a trial court, applying this amendment, rules that an expert's testimony is reliable, this does not necessarily mean that contradictory expert testimony is unreliable. The amendment is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise. Contrary and inconsistent opinions may simultaneously meet the threshold; it is for the factfinder to reconcile--or choose between--the different opinions. As such, this amendment is not intended to provide an excuse for an automatic challenge to the testimony of every expert, and it is not contemplated that evidentiary hearings will be routinely required in order for the trial judge to fulfill his role as a rationally skeptical gatekeeper. In the typical case, admissibility under the rule may be determined based on affidavits, expert reports prepared pursuant to [Utah R.Civ.P. 26](#), deposition testimony and memoranda of counsel.

Rules of Evid., Rule 702, UT R REV Rule 702
Current with amendments received through May 15, 2018

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Addendum F

[West's Utah Code Annotated](#)
[State Court Rules](#)
[Utah Rules of Criminal Procedure](#)

Utah Rules of Criminal Procedure Rule 23

RULE 23. ARREST OF JUDGMENT

[Currentness](#)

At any time prior to the imposition of sentence, the court upon its own initiative may, or upon motion of a defendant shall, arrest judgment if the facts proved or admitted do not constitute a public offense, or the defendant is mentally ill, or there is other good cause for the arrest of judgment. Upon arresting judgment the court may, unless a judgment of acquittal of the offense charged is entered or jeopardy has attached, order a commitment until the defendant is charged anew or retried, or may enter any other order as may be just and proper under the circumstances.

[Notes of Decisions \(21\)](#)

Rules Crim. Proc., Rule 23, UT R RCRP Rule 23

Current with amendments received through May 15, 2018

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