

IN THE SUPREME COURT OF OHIO

-----x		:	Case No. 2009-0605
STATE OF OHIO,		:	
	Plaintiff-Appellee,	:	On Appeal from the
	v.	:	Summit County
		:	Court of Appeals
DOUGLAS PRADE,		:	Ninth Appellate District
	Defendant-Appellant.	:	Court of Appeals
-----x		:	Case No. 24296

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**BRIEF OF AMICUS CURIAE THE INNOCENCE NETWORK  
IN SUPPORT OF DEFENDANT-APPELLANT, DOUGLAS PRADE**

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## INTRODUCTORY STATEMENT

Douglas Prade was convicted in 1998 of murder after a trial in which the prosecution offered expert testimony identifying him as the source of a bite mark on the victim. Mr. Prade now seeks access to potential sources of DNA forensic evidence, including the victim's lab coat through which this bite mark was inflicted, in order to subject them to the latest DNA forensic testing methods. Because the probative value of bite mark evidence is severely limited in either identifying or excluding a perpetrator of a crime, access to DNA evidence is critical to a just resolution of Mr. Prade's case. Indeed, DNA evidence of this kind has played a key role in exonerating more than a dozen persons charged or convicted on the basis of bite mark evidence.

It has been widely recognized among leading forensic odontologists who opine on bite mark evidence that the probative value of such evidence is greatly strengthened by DNA forensic testing of saliva from the site of a bite mark. Such DNA testing is now widely accepted by forensic odontologists as an essential complement to traditional bite mark analysis. The prior DNA testing performed in this case, however, was not sufficiently sensitive to isolate the biter's DNA from the victim's in the sample taken from the bite mark, which renders it impossible to definitively exclude or include Mr. Prade as the source of the bite mark.

In cases such as these, newly available DNA tests that can isolate the biter's DNA have proven to be crucial in identifying or excluding the perpetrator. Because there appears to be no dispute that the killer inflicted the bite mark in this case, the results of such DNA testing could thus be critical in determining the perpetrator's identity, as it has in other bite mark cases where such DNA evidence has been used to

exonerate individuals where bite mark analyses resulted in erroneous charges or conviction.

### **INTEREST OF THE AMICUS CURIAE**

The Innocence Network (“Network”) is an association of organizations dedicated to providing pro bono legal and/or investigative services to prisoners for whom evidence discovered after conviction can provide conclusive proof of innocence. The forty-five current members of the Network represent hundreds of prisoners with innocence claims in all 50 states and the District of Columbia, as well as Canada, the United Kingdom, and Australia. The Innocence Network and its members are also dedicated to improving the accuracy and reliability of the criminal justice system. Drawing on lessons from cases in which innocent persons have been wrongfully convicted, the Network also advocates study and reform to improve the truth-seeking functions of the criminal justice system. The Network pioneered the post-conviction DNA model that has to date exonerated over 200 innocent persons and served as counsel in the majority of these cases. As perhaps the nation’s leading authority on wrongful convictions, the Network and its founders, Barry Scheck and Peter Neufeld (both of whom are members of New York State’s Commission on Forensic Science, charged with regulating state and local crime laboratories), are regularly consulted by officials at the state, local and federal levels.

Over half of the more than 200 post-conviction DNA exonerations by the Innocence Network have involved the misapplication of forensic disciplines—including bite mark analysis. See, e.g., Innocence Project, Facts on Post-Conviction DNA Exonerations, <http://innocenceproject.org/Content/351.php>. This work has given Amicus

a particularly strong interest in ensuring that when criminal convictions are predicated upon limited and subjective forensic disciplines like bite mark analysis, the convicted obtain access to evidence for DNA testing that may prove their innocence—an interest directly implicated in Douglas Prade’s case.

### **STATEMENT OF FACTS**

On November 26, 1997, Dr. Margo Prade was shot and killed in her van while parked outside of her medical office in Akron, Ohio. Her ex-husband, Douglas Prade, was tried and convicted for her murder and sentenced to life in prison. Mr. Prade has always maintained his innocence.

The evidence did not conclusively link Mr. Prade to the crime. There were no witnesses to the incident and a surveillance tape did not yield a positive identification of the perpetrator. While the tape showed the perpetrator getting into a car, that car was never found, nor was the murder weapon recovered. Two eyewitnesses testified that they saw Mr. Prade near the scene of the crime, but the circumstances of their identifications were questionable. One witness did not come forward until nine months after the murder, and after he had seen Mr. Prade’s picture in the news regarding his impending trial; the second witness’s description of the perpetrator changed over the course of the investigation.

Despite the availability of DNA testing at the time, police were unable to identify the perpetrator based on the DNA evidence recovered from the scene. The “best possible source of DNA evidence as to [the] killer’s identity” was the site of a bite mark: during the attack, Dr. Prade’s killer bit her forearm with enough force to leave a mark on her skin through two layers of clothing – her lab coat and blouse. (Trial Transcript (“TT”)

at 1125:13-22; 1164:3-11; 1172:7-14). However, according to the State's DNA expert, it was impossible to isolate and identify any DNA left by the perpetrator using the then available DNA forensic technology, because the bite area was covered with Dr. Prade's blood. (Id. at 1111:6-1112:10.)

The bite mark analysis evidence was thus an important component of the prosecution's case. The State presented two forensic odontologists who compared photographs of the bite mark with dental impressions of Mr. Prade's teeth. (Id. at 1226:8-13; 1406:1-14). Dr. Thomas Marshall testified that the bite mark "was made by Captain Prade." (Id. at 1406:1-14). Dr. Lowell Levine testified that the mark was "consistent" with Mr. Prade's teeth and that Mr. Prade "could have" caused the bite mark, but could not identify Mr. Prade as the biter with any reasonable degree of scientific certainty. (Id. at 1225:25-1226:2; 1228:10-17). The defense also called a forensic odontologist who testified that Mr. Prade could not have made the bite mark because Mr. Prade's upper denture fit so poorly that he could not have bitten Dr. Prade with the force necessary to make a bite mark through two pieces of clothing. (Id. at 1648:10-1649:19.)

### ARGUMENT

Forensic bite mark evidence generally, and the specific expert testimony tying Mr. Prade to the bite mark in this case, is of limited probative value. In fact, leading experts in the field of forensic odontology refuse to sanction the practice of definitively identifying a perpetrator solely based on a comparative analysis of bite mark evidence. In this case, however, one of the testifying experts did just that.

DNA evidence taken from saliva left on bite marks, by contrast, is now considered conclusive by the leading experts in the field, who recognize that it is an essential component of any sound bite mark analysis. Such testing has already resulted in the exoneration of more than a dozen individuals wrongly implicated by comparative bite mark analysis. In Mr. Prade's case, crucial DNA evidence from the bite mark could not be tested at the time of his trial because of the commingling of the victim's blood with saliva from the bite. Today, however, that technology is available, and it could be used to definitely prove his innocence or guilt.

For these reasons, Amicus requests that this Court reverse the court below, and hold that the prior DNA tests were not "prior definitive test[s]" under Ohio law. Amicus further requests that this Court find that the results of new DNA testing which can isolate and identify the source of the bite mark would not be "duplicative" of the DNA evidence presented at trial, and would be "outcome determinative."

**I. Bite Mark Analysis Has Limited Probative Value.**

The comparative bite mark analysis offered by the State at Mr. Prade's trial was of limited probative value. A recent report by the National Academy of Sciences found "considerable dispute about the value and reliability" of comparative bite mark analysis. National Research Council of the National Academies, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD (2009) 5-37 [hereinafter "NRC Report"]. Indeed, the report noted that "[w]ith the exception of nuclear DNA analysis, . . . no forensic method has been rigorously shown to . . . consistently, and with a high degree of certainty" connect forensic evidence to a specific individual. NRC Report, at S-5.

Comparative bite mark analysis is specifically limited as a source of reliable forensic evidence by the failure of bite mark impressions to accurately reflect the biter's teeth, by the lack of any established criteria for determining a match, and by the resulting subjectivity of each analyst's conclusions. Moreover, these limitations have been reflected in disturbingly high error rates in every study of the accuracy of bite mark analysis. In fact, the type of conclusive identification offered by one of the State's two bite mark experts in this case has been expressly disavowed by the governing body for forensic odontology.

A. **Bite Mark Analysis Is an Uncertain and Imprecise Method of Forensic Analysis.**

Bite mark analysis is an unavoidably speculative method of forensic testing. See David Sweet, *Bitemarks as Biological Evidence*, in *BITEMARK EVIDENCE* (Robert B. J. Dorion ed., 2005) at 190-91 ("Conclusions from physical comparison tests are necessarily conditional since a high level of certainty is not possible using such tests, which are subjective.") A forensic odontologist must attempt to match the characteristics of an individual's teeth to the impressions left on the victim by the biter. Bite marks do not, however, necessarily reflect the actual characteristics of the biter's teeth, and there are no established criteria for determining a match.

As one expert has noted: "[Bite] marks can never be taken to reproduce accurately the dental features of the originator. This is due partially to the fact that bite marks generally include only a limited number of teeth . . . . [Additionally,] the material (whether foodstuff or human skin) in which the mark has been left is usually . . . very unsatisfactory impression material with [unknown] shrinkage and distortion

characteristics. Finally, these marks represent only the remaining and fixed picture of an action . . . .” S. Keiser-Neilsen, *Forensic Odontology* (1969), 1 U. Tol. L. Rev. 633, 636. A victim’s skin is a particularly bad surface for registering bite marks because “it is highly variable in terms of anatomical location, underlying musculature, fat, curvature, and looseness or adherence to underlying tissues.” I. A. Pretty, *Unresolved Issues in Bitemark Analysis*, in BITEMARK EVIDENCE (Robert B. J. Dorion ed., 2005), at 549. As a result, identifying the source of bite marks on skin is necessarily speculative. See NRC Report, at 5-35 (because skin can “change over time and can be distorted by the elasticity of the skin, the unevenness of the surface bite, and swelling and healing,” the validity of forensic odontology “may [be] severely limit[ed]”).

Furthermore, there are no professional guidelines for determining the accuracy of a bite mark comparison or the probability of a match. While the American Board of Forensic Odontology has established guidelines regarding techniques for bite mark analysis, “[t]he guidelines . . . do not indicate the criteria necessary for . . . determin[ing] whether the bite mark can be related to a person’s dentition and with what degree of probability.” NRC Report (2009), at 5-35 to 5-36. There is no requirement for a minimum number of points of similarity before a forensic odontologist can state that there is a match. 1 Paul Giannelli and Edward Imwinkelreid, Jr., *SCIENTIFIC EVIDENCE* (4th Ed. 2007), § 13.02 at 670. And even if a bite mark has multiple points of similarity to the known set of teeth, it is not possible to determine “what percentage of the population or subgroup of the population could also have produced the bite.” NRC Report (2009), at 5-36.

Not surprisingly, this lack of precision inherent in bite mark analysis leads to the result that “dental experts seldom agree with one another at trial . . . not only regarding the identification of the biter [but also regarding] whether a bitemark exists at all.” C. Michael Bowers, *Problem-based analysis of bite mark misidentification: The role of DNA* (2006), 159S Forensic Sci. Int'l S104, S106; see also, e.g., *Kinney v. State*, 315 Ark. 481, 485, 868 S.W.2d 463 (1994) (disagreement between experts regarding whether the mark was a bite mark); *People v. Noguera*, 4 Cal.4th 599, 613 n.1, 842 P.2d 1160 (1992) (“At trial, extensive testimony by forensic odontologists was presented by both sides, pro and con, as to whether the wounds were human bite marks and, if so, when they were inflicted.”). The testimony at Mr. Prade’s trial reflected just such a conflict among the experts’ bite mark analyses, as the three forensic odontologists arrived at three different conclusions.

**B. Bite Mark Analysis Is Associated with a High Error Rate.**

The seriousness of these limitations on the reliability of bite mark analysis is confirmed by the three studies of bite mark analysis accuracy performed to date. Each of those studies indicates that the conclusions of forensic odontologists are subject to a disturbing rate of error.

The first study of bite mark analyses, conducted in 1975, found high error rates when experts attempted to match dental models to bite marks on pig skin (a material similar to human skin). In fact, “[i]ncorrect identification of the bites . . . ranged from 24% incorrect identifications under ideal laboratory conditions to as high as 91% incorrect identifications when the bites were photographed [twenty-four hours] after the

bites were made.” Bowers, *supra*, at S106 (discussing D. K. Whittaker, *Some laboratory studies on the accuracy of bite mark comparison* (1975), 25 *Int’l Dental J.* 166.).

A 1999 study was conducted at an American Board of Forensic Odontology Bite-mark Workshop where certified forensic odontologists attempted to match four bite marks to seven dental models. The results were wrong 63.5% of the time. *Id.* In a 2001 study, the results were somewhat better, with a false-positive rate of only 11.9% to 22%. *Id.* Even with these better results, the study’s authors found them to be of serious concern for the legitimacy of the field. *Id.* At the very least, these ranges of error “suggest that the range of ability [among forensic odontologists] is wide,” and “that the tests [used to identify bite marks] are still subjective.” I. A. Pretty, *Reliability of Bite-mark Evidence*, in *BITEMARK EVIDENCE* (Robert B. J. Dorion ed., 2005), at 543.

**C. Conclusive Identifications Based on Bite Mark Evidence Have Been Seriously Questioned.**

In light of the limitations of bite mark analysis, many leading experts and commentators have questioned whether such analysis can conclusively identify an individual as the source of a bite mark. See NRC Report, at 5-37 (there is “no evidence of an existing scientific basis for identifying an individual to the exclusion of all others” based on bite mark analysis); see also Bowers, *supra*, at S106 (“Opinions of positive linkage between injuries and a specific person are not arrived at via scientific rigor.”). The American Board of Forensic Odontology explicitly warns forensic odontologists that “[t]erms assuring unconditional identification of a perpetrator . . . are not sanctioned as a final conclusion.” American Board of Forensic Odontology, *Diplomates Reference Manual* (2009) 125, available at <http://www.abfo.org> (last visited August 27, 2009). The

Sixth Circuit likewise recently noted the danger of even admitting “definitive” bite mark testimony, noting that such “[b]ite mark evidence may by its very nature be overly prejudicial and unreliable . . . .” *Ege v. Yukins*, 485 F.3d 364, 376 (6th Cir. 2007), (reviewing testimony that no one in the Detroit Metropolitan Area except the defendant could have made the bite mark).

## **II. DNA Forensic Evidence From Bite Marks May Provide Conclusive Evidence of Guilt or Innocence.**

DNA forensic evidence drawn from the site of a bite mark is increasingly viewed as a necessary and invaluable component of any bite mark analysis, because of the degree of reliability it adds. Within the forensic odontology field itself, the collection and testing of DNA evidence in bite mark cases is now accepted practice, and DNA evidence is preferred to bite mark analysis, where available, for its superior accuracy. I.

### *A. Pretty, A Web-Based Survey of Odontologists’ Opinions Concerning Bitemark*

*Analyses* (2003), 48 J Forensic Sci 1117, 1119 (“[T]he use of this objective method [i.e. DNA testing] has been well described and the advantages of the technique over the more subjective overlay systems are well accepted.”).

#### **A. DNA Evidence is More Reliable than Comparative Bite Mark Analysis Evidence.**

DNA testing is generally accepted as significantly more reliable and scientifically grounded than comparative bite mark analysis evidence. Indeed, DNA analysis “has set the bar higher for other forensic science methodologies, because it has provided a tool with a higher degree of reliability and relevance than any other forensic technique.” NRC Report at 1-5. The accuracy and precision of DNA evidence in both absolute and relative terms has been recognized by the United States Supreme Court. *See*

*District Attorney's Office for Third Judicial Dist. v. Osborne*, \_\_\_ U.S. \_\_\_, 129 S.Ct. 2308, 2316 (U.S. 2009) (“Modern DNA testing can provide powerful new evidence unlike anything known before...It is now often possible to determine whether a biological tissue matches a suspect with near certainty.”)

For example, the STR method of DNA testing developed since Mr. Prade’s conviction can produce results of unparalleled accuracy: the probability of an STR-DNA profile matching two unrelated persons often ranges from 1 in a billion to 1 in a quintillion, far larger than the world’s entire population. 2 Paul Giannelli and Edward Imwinkelreid, *SCIENTIFIC EVIDENCE* (4th Ed. 2007), § 18.03[d] at 33. STR testing may also be performed on extremely small quantities of DNA, and can even isolate, through the use of Y-chromosome STR testing, a male suspect’s DNA that is mixed with a female victim’s DNA. *Id.* at 33, 43-44. Use of Y-STR testing in this case could therefore isolate a male biter’s DNA despite the presence of far larger amounts of Dr. Prade’s DNA, overcoming the obstacle that thwarted a definitive DNA test at the time of trial. See TT at 1111:6-1112:10.

**B. DNA Analysis of Evidence from Bite Marks is Viewed as Essential by Leading Forensic Odontologists.**

Over the last decade, forensic odontologists have specifically recognized the superiority of DNA analysis, where available, for identification of bite marks. See, e.g., Pretty, *A Web-Based Survey*, supra, at 1119; I. A. Pretty and David Sweet, *The scientific basis for human bitemark analysis – a critical review* (2001), 41 *Sci. & Just.* 85, 92 (“It is important to mention that research in bitemark identification using salivary DNA has progressed over recent years. This highly objective method of analysis is to be

recommended[.]”); David Sweet & Gary G. Shutler, *Analysis of Salivary DNA Evidence from a Bite Mark on a Body Submerged in Water* (1999), 44 J. Forensic Sci. 1069, 1069 (“[M]any investigators now consider the saliva deposited during biting, especially the DNA present in saliva, to be an important alternative focus in bite mark analysis.”) This recognition has resulted in the incorporation of DNA gathering and testing into standard bite mark analysis practice. See American Board of Forensic Odontology, Diplomates Reference Manual (2009) 116-117 (setting forth guidelines for collection of DNA evidence from bite mark); Sweet, *Bitemarks as Biological Evidence*, supra, at 183-201; NRC Report, 5-35 (“The techniques for obtaining bite mark evidence from human skin – for example...swabbing for serology or DNA – generally are well established and relatively noncontroversial.”). Biological materials for testing may be gathered either by taking swabs of a bite mark made directly on skin, or, as in this case, by taking a sample of clothing through which a bite mark was made. Sweet, *Bitemarks as Biological Evidence*, supra, at 189-190.

“Data obtained through the analysis of DNA are objective, and if the analysis methodology has been correctly performed, the resulting conclusions are difficult to dispute.” Id. at 192. By contrast, “conclusions from physical comparison tests are necessarily conditional since a high level of certainty is not possible from such tests, which are subjective.” Id. at 190-91. Moreover, “[t]here is absolute certainty associated with a DNA result that produces an exclusion of the biter.” Id. at 192. The necessity for DNA evidence has been recognized particularly where, as in the case of Mr. Prade, forensic odontologists give conflicting opinions about whether a defendant could have produced the bite mark in question: “When reputable practitioners strongly disagree with

each other, there needs to be a reliable scientific method to prevent past and future errors.” Bowers, *supra*, at S107.

In short, DNA testing of saliva left by a biter is today a crucial component of any bite mark investigation, because the absence of such testing may yield identifications that are uncertain at best, and clearly erroneous in other instances. Due to the limitations of the available testing methodologies at the time of trial, Mr. Prade was previously unable to obtain such testing. But in order to positively identify the perpetrator based on the bite mark, today's forensic odontological best practices would also require STR testing to isolate DNA from the biter's saliva. Under those circumstances, allowing access to DNA testing is not only just, but also mandated by the weight of scientific opinion.

C. **DNA Evidence Has Proven the Innocence of Many Individuals Falsely Implicated by Bite Mark Evidence.**

The need for DNA testing is underscored by the increasingly frequent cases in which DNA evidence has been crucial in exonerating persons wrongfully or erroneously implicated by comparative bite mark analysis. At least 13 such cases have been reported to date. In some cases, the DNA testing which excluded the suspect was completed prior to trial, preventing an erroneous conviction. See *Burke v. Town of Walpole*, 405 F.3d 66, 73-74 (1st Cir. 2005); *Otero v. Warnick*, 241 Mich. App. 143, 144-145, 614 N.W.2d 177 (Mich. Ct. App. 2000); *Mississippi v. Gates*, No. 5060 (Miss. Cir. Ct., Humphrey Cty. 1998) (cited in 3 MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY 527 (David L. Faigman et al. eds., 2002)); *Florida v. Dale Morris*, 97-3251 CFAES, (Fla. Pasco County Ct. 1997); *Mississippi v. Bourn*, No.

93-10,214(3) (Miss. Cir. Ct., Jackson Cty. 1993) (cited in 3 MODERN SCIENTIFIC EVIDENCE 527); see also Flynn McRoberts and Steve Mills, *From the start, a faulty science*, CHICAGO TRIBUNE, Oct. 19, 2004 at C1 (discussing cases of Dale Morris, Jr. and Edmund Burke); Mark Hansen, *Out of the Blue* (1996), 82 A.B.A.J. 50 (discussing case of Johnny Bourn).

In at least eight other cases, persons were wrongfully convicted based on bite mark testimony, and spent years in prison before adequate DNA testing revealed the errors. See *O'Donnell v. New York*, 26 A.D. 3d 59, 60-61, 808 N.Y.S.2d 266 (N.Y. App. Div. 2d Dept. 2005); Sharif Durhams, *Judge frees man after 23 years*, MILWAUKEE JOURNAL-SENTINEL, Jan. 30, 2009, at A1 (Robert Lee Stinson); Melanic Lasoff Levs, *Bite-Mark Evidence Loses Teeth* (2008), 94 A.B.A.J. 16 (Kennedy Brewer); Fernanda Santos, *With DNA From Exhumed Body, Man Finally Wins Freedom*, N.Y. TIMES, Jan. 24, 2007, at B5 (Roy Brown); Paul Purpura, *Long Nightmare Ending for Wrongly Convicted Man – DNA brings dismissal of case after 16 Years*, NEW ORLEANS TIMES-PICAYUNE, May 26, 2006, at 1 (Willie Jackson); Steve Mills and Jeff Coen, *12 years behind bars, now justice at last*, CHICAGO TRIBUNE, Feb. 1, 2005, at C1 (Dan Young, Jr.); Mark Hansen, *The Uncertain Science of Evidence* (2005), 91 A.B.A.J. 48 (Ray Krone); *Waco men were victims of an investigation gone awry*, AP STATE AND LOCAL WIRE, Dec. 15, 2001 (Calvin Washington).

These examples demonstrate that DNA evidence of the kind sought by Mr. Prade can be outcome determinative. Four cases in particular illustrate that point. In each case, one or more forensic odontologists identified the defendant as the biter. In each case, analysis of DNA from saliva on the bite mark proved that, in fact, the

defendant and the biter were not the same person. One case involves one of the experts called by the State at Mr. Prade's trial. DNA testing available at the time was sufficient to exculpate that individual prior to trial. The other three persons were convicted after trials involving identifications based on bite mark analysis that were shown to be erroneous by subsequent court-authorized DNA testing.

*Edmund Burke*

Burke was arrested in 1998 for the murder of a 75-year-old woman. *Burke*, 405 F.3d at 71, 74. The perpetrator left two bite marks on her breasts, which were photographed and swabbed to collect DNA evidence. *Id.* at 71, 73. After Burke was identified as a suspect, he provided a sample of his saliva and agreed to allow the police to make a mold of his teeth for comparison with the photographs of the bite mark. *Id.* at 72-73.

Dr. Lowell Levine was retained to perform a bite mark analysis in the case. *Id.* at 73. Based on his review of the mold and the photographs, Dr. Levine "formed an initial opinion that Burke could not be excluded as the source of the bite marks," but asked for enhanced photographs in order to render a final opinion. *Id.* Having received the enhanced photographs, Dr. Levine opined that "Burke's teeth matched the bite mark on the victim's left breast to a 'reasonable degree of scientific certainty.'" *Id.*

Notwithstanding this opinion, DNA analysis of the bite mark swab excluded Burke as the source of the DNA, and the case against Burke was subsequently dismissed. *Id.* at 74. The actual perpetrator was ultimately identified by matching the DNA derived from the bite mark to a profile in a DNA database. *Id.* at 74 n. 6; see also

McRoberts and Mills, *supra* (“the genetic profile derived from the bite mark, the police said, had been entered into a database [and] hit on a convicted murderer.”)

*Ray Krone*

Krone was convicted in 1992 of the murder of a bartender and sentenced to death. *State v. Krone*, 182 Ariz. 319, 319-320, 897 P.2d 621 (1995). Bite marks were found on the victim’s neck and, through her tank top, on her left breast. *Id.* at 320.

While there was evidence that the victim expected to see Krone on the night of her death, and Krone was evasive with police about the nature of his relationship with her, the primary evidence against Krone was the testimony of two forensic odontologists identifying Krone as the biter. *Id.* at 320-321.

The first expert testified that “That’s as nice a match as we – as we really ever see in a bite mark case.” Brandon L. Garrett, *Invalid Forensic Science Testimony and Wrongful Convictions*, 95 Va. L. Rev 1 (2009), 69-70 (quoting *State v. Krone* trial transcript). Asked to clarify if a “nice match” was an accurate one, he stated “Yes. That was a nonscientific term. This is really an excellent match, and would be held in high regard by forensic odontologists.” *Id.* In conclusion, the expert agreed that “it was Ray Krone’s teeth.” *Id.* The second expert concurred with the opinion, stating “I say that there is a match. Okay? I’m saying there’s a definite match.” *Id.*

Krone was granted a new trial in 1995 based on discovery violations relating to one expert’s testimony, *Krone*, 182 Ariz. at 323, but Krone was again convicted on the basis of bite mark evidence at his retrial, and sentenced to life in prison. Robert Nelson, *About Face*, PHOENIX NEW TIMES, April 21, 2005; Hansen, *The Uncertain Science*, *supra*. In 2002, however, DNA testing was finally conducted on the

saliva-stained top, over the opposition of the State's attorneys. Nelson, *supra*. The test results exculpated Krone, and the resulting DNA profile was run against the FBI's CODIS database,<sup>1</sup> identifying the actual perpetrator. Hansen, *The Uncertain Science*, *supra*.

### *Roy Brown*

Roy Brown was tried in 1992 for the murder of a social services worker, on whose body seven bite marks were left. *People v. Brown*, 162 Misc.2d 555, 556, 618 N.Y.S.2d 188 (Co. Ct. Cayuga Co. 1994). The evidence presented against Brown was that (1) Brown had threatened the victim; (2) that he would often bite people when angry; (3) that he had admitted killing a girl; and (4) expert bite mark testimony. *Id.* That witness testified that the bite marks were similar to Brown's dentition to "a reasonable degree of dental certainty," and called the differences he observed "[i]nconsistent but explainably so in [his] opinion." Garrett, *supra*, at 69 (quoting *People v. Brown* trial transcript). Notwithstanding conflicting expert testimony offered by Brown, he was convicted and found guilty after trial.

In 1994, Brown was denied DNA testing of saliva samples from the victim's nightgown. *Brown*, 162 Misc.2d at 558. During the next decade in prison, Brown learned the identity of the true perpetrator, and prosecutors finally consented to

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<sup>1</sup> CODIS, the national DNA databank system, is a digital state and federal registry of STR-DNA profiles from convicted felons, unsolved crimes, and missing persons. Department of Justice, *THE FUTURE OF FORENSIC DNA TESTING: PREDICTIONS OF THE RESEARCH AND DEVELOPMENT GROUP* (2000) at 19-20. The system contained 7,137,468 unique offender profiles as of June 2009, and has produced over 93,200 hits assisting in more than 91,800 investigations. FBI CODIS-NDIS Statistics Webpage, available at <http://www.fbi.gov/hq/lab/codis/clickmap.htm> (last visited August 16, 2009).

DNA testing in 2006. John Smith, *Another Chance for Convicted Murderer*, POST-STANDARD (Syracuse, N.Y.), Apr. 21, 2006 at A1. The tests first excluded Brown as the biter, and then ultimately confirmed that the DNA from the saliva samples matched that of the individual identified by Brown. Santos, *supra*. Brown was finally released in 2007 after fifteen years in prison. *Id.*

*Robert Lee Stinson*

Robert Lee Stinson is the most recent innocent person exonerated by DNA evidence after being convicted based on inaccurate bite mark testimony. Stinson was convicted of the 1984 murder of a seventy-three year old victim. *State v. Stinson*, 134 Wis.2d 224, 227, 397 N.W.2d 136 (Wis. App. 1986). The conviction was supported by the expert testimony of two forensic odontologists, including the expert who had testified that “it was Roy Krone’s teeth” at Krone’s trial. *Id.* at 238.

The first expert testified that the bites he examined “had to have been made by teeth identical in all of these characteristics to those that I examined on Robert Lee [Stinson].” *Id.* at 231. The expert from Krone’s trial also concluded to a reasonable degree of scientific certainty that Stinson was the biter, stating that “the evidence in the case was ‘high quality’ and ‘overwhelming,’” and “that this was an ‘exceptional’ case because ‘[t]here were more ... pieces of evidence than you usually see in a bite mark case.’” *Id.* Stinson did not present a bite mark comparison expert in his defense. Stinson was found guilty and sentenced to life imprisonment. *Id.* at 227.

In 2004, prosecutors gave Stinson access to the sweater worn by the victim during the attack. Durhams, *supra*. DNA testing on the sweater detected male saliva that did not belong to Stinson. *Id.* In addition, a forensic review by four additional

forensic odontologists, using modern bite mark comparison techniques, excluded Stinson as a possible match for the bite marks. Tom Kertscher, *Freed man won't be retried for '84 killing*, MILWAUKEE JOURNAL-SENTINEL, July 27, 2009 at B1. Stinson was finally granted a new trial and released from prison in January of this year, and prosecutors announced last month that they would not retry him. Id.

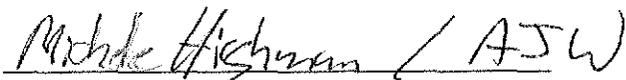
These four cases show that saliva from bite marks can be outcome determinative, especially in the face of a dispute among forensic odontologists as to whether such bite marks are actually a match.

### **CONCLUSION**

For all of the foregoing reasons, as well as the reasons contained in the brief of Appellant Douglas Prade, Amicus respectfully urges the Court to reverse the decision of the court below denying Mr. Prade's request for DNA testing.

August 31, 2009

Respectfully Submitted,



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**CERTIFICATE OF SERVICE**

A copy of the foregoing document was served this 31st day of August, 2009, by U.S. Mail, postage prepaid, on (1) Sherri Bevan Walsh, Prosecuting Attorney, and Richard S. Kasay, Assistant Prosecuting Attorney, Appellate Division, Summit County Safety Building, 53 University Avenue, Akron, Ohio 44308; (2) Richard Cordray, Ohio Attorney General, Ohio Attorney General's Office, DNA Testing Unit, 150 East Gay Street, 16th Floor, Columbus, Ohio 43215; (3) David Booth Alden, Jones Day, North Point, 901 Lakeside Avenue, Cleveland, Ohio 44114; and (4) Mark Godsey, Univ. of Cincinnati College of Law, Post Office Box 210040, Cincinnati, Ohio 45221.

A handwritten signature in black ink, appearing to read 'Alexander J. Wilson', written over a horizontal line.

Alexander J. Wilson