

Supreme Court of Florida

---

No. SC16-2182  
*LT 4D13-4351, 4D14-146*

---

**RICHARD DELISLE,**  
*Petitioner,*  
v.

**CRANE CO. AND R.J. REYNOLDS TOBACCO CO.,**  
*Respondents.*

---

**BRIEF OF THE NATIONAL ASSOCIATION OF CRIMINAL DEFENSE  
LAWYERS AS *AMICUS CURIAE* IN SUPPORT OF RESPONDENTS**

---

**KATZ BARRON**

H. Eugene Lindsey III (FBN 0130338)  
[hel@katzbarron.com](mailto:hel@katzbarron.com)  
Regional Vice Chair, 11th Circuit  
Amicus Committee  
NATIONAL ASSOCIATION OF  
CRIMINAL DEFENSE LAWYERS  
2699 S. Bayshore Drive, 7th Floor  
Miami, FL 33133  
Telephone: (305) 856-2444  
Facsimile: (305) 285-9227

**HOLLAND & KNIGHT LLP**

William N. Shepherd (FBN 88668)  
[William.shepherd@hklaw.com](mailto:William.shepherd@hklaw.com)  
Jason D. Lazarus (FBN 139040)  
[Jason.lazarus@hklaw.com](mailto:Jason.lazarus@hklaw.com)  
Tiffany Roddenberry (FBN 92524)  
[Tiffany.roddenberry@hklaw.com](mailto:Tiffany.roddenberry@hklaw.com)  
222 Lakeview Avenue, Suite 1000  
West Palm Beach, FL 33401  
Tel: (561) 833-2000  
Fax: (561) 650-8399

*Counsel for Amicus Curiae The National Association of Criminal Defense Lawyers*

## TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES.....	ii
IDENTITY & INTEREST OF <i>AMICUS CURIAE</i> .....	1
SUMMARY OF ARGUMENT.....	2
ARGUMENT .....	4
The <i>Daubert</i> Standard Is Superior To <i>Frye</i> For Ensuring The Reliability Of Expert Evidence And Preventing Wrongful Convictions .....	4
A. Unlike <i>Frye</i> , Expert Testimony Under <i>Daubert</i> Must Be Based On More Than “Pure Opinion”.....	4
B. Unlike <i>Frye</i> , Which Is Limited To Considering The Expert’s Methodology, <i>Daubert</i> Evaluates The Reliability Of An Expert’s Methodology, Reasoning And Opinions.....	6
C. Unlike <i>Daubert</i> , Which Applies to All Expert Testimony, <i>Frye</i> Only Applies to “New or Novel” Scientific Techniques .....	8
D. A Number of Unreliable Forensic Techniques Are Admitted Under <i>Frye</i> Because They Are No Longer New or Novel.....	9
1) Forensic Odontology (Bite Mark Analysis) .....	9
2) Hair Microscopy (Microscopic Hair Comparison).....	12
3) Numerous Other Forensic Techniques Which Are Admitted In Courtrooms Because They Are Not New or Novel Lack An Adequate Scientific Basis .....	14
E. The <i>Frye</i> Standard, Which Measures General Acceptance By the Insular Community In Question, Exacerbates The Problem Of Junk Science .....	17
CONCLUSION .....	19
CERTIFICATE OF SERVICE.....	21
CERTIFICATE OF COMPLIANCE .....	23

## TABLE OF AUTHORITIES

CASES	Page
<i>Allison v. McGhan Med. Corp.</i> , 184 F. 3d 1300 (11th Cir. 1999).....	5, 7
<i>Anderson v. State</i> , 220 So. 3d 1133 (Fla. 2017).....	16
<i>Boyd v. State</i> , 200 So. 3d 685 (Fla. 2015).....	12
<i>Brown v. State</i> , 426 So. 2d 76 (Fla. 1st DCA 1983), <i>disapproved on other grounds, Bundy v. State</i> , 471 So. 2d 9 (Fla. 1985) .....	9
<i>Bundy v. State</i> , 455 So. 2d 330 (Fla. 1984).....	9, 12
<i>Castillo v. E.I. du Pont de Nemours &amp; Co.</i> , 854 So. 2d 1264 (Fla. 2003).....	7
<i>Chapman v. Procter &amp; Gamble Distrib., LLC</i> , 766 F. 3d 1296 (11th Cir. 2014).....	7, 8
<i>Daubert v. Merrell Dow Pharm., Inc.</i> , 509 U.S. 579 (1993).....	<i>passim</i>
<i>Fones v. State</i> , 765 So. 2d 849 (Fla. 4th DCA 2000).....	16
<i>Foster v. State</i> , 132 So. 3d 40 (Fla. 2013).....	16
<i>Frye v. United States</i> , 293 F. 1013 (D.C. Cir. 1923).....	<i>passim</i>
<i>Gelsthorpe v. Weinstein</i> , 897 So. 2d 504 (Fla. 2d DCA 2005) .....	7
<i>Hadden v. State</i> , 690 So. 2d 573 (Fla. 1997).....	4

## TABLE OF AUTHORITIES

<b>CASES</b>	<b>Page</b>
<i>Hood v. Matrixx Initiatives, Inc.</i> , 50 So. 3d 1166 (Fla. 4th DCA 2010).....	5
<i>Ibar v. State</i> , 938 So. 2d 451 (Fla. 2006).....	16
<i>King v. State</i> , 89 So. 3d 209 (Fla. 2012).....	8
<i>Kumho Tire Co. v. Carmichael</i> , 526 U.S. 137 (1999).....	5, 8, 9
<i>Marsh v. Valyou</i> , 977 So. 2d 543 (Fla. 2007).....	4, 8
<i>McClain v. Metabolife, Int’l, Inc.</i> , 401 F. 3d 1233 (11th Cir. 2005).....	5
<i>McDonald v. State</i> , 952 So. 2d 484 (Fla. 2006).....	14
<i>Mitchell v. State</i> , 527 So. 2d 179 (Fla. 1988).....	12
<i>Murray v. State</i> , 3 So. 2d 1108 (Fla. 2009).....	14
<i>People v. Marx</i> 126 Cal. Rptr. 350 (Cal. Ct. App. 1975).....	12
<i>Perez v. Bell S. Telecomm., Inc.</i> , 138 So. 3d 492 (Fla. 3d DCA 2014) .....	6, 8, 17
<i>Rider v. Sandoz Pharms. Corp.</i> , 295 F. 3d 1194 (11th Cir. 2002).....	18
<i>Spann v. State</i> , 857 So. 2d 845 (Fla. 2003).....	16, 17

## TABLE OF AUTHORITIES

<b>CASES</b>	<b>Page</b>
<i>State v. Roscoe</i> , 910 P. 2d 635 (Ariz. 1996).....	14
 <b>STATUTES</b>	
Section 90.702, Florida Statutes.....	8
 <b>RULES</b>	
Rule 9.210(a)(2), Florida Rules of Appellate Procedure .....	24
Rule 702, Federal Rules of Evidence .....	6
 <b>OTHER AUTHORITIES</b>	
Andrew Flake, Eric Harlan, and James King, <i>50 State Survey of Applicability of Daubert</i> , A.B.A. (2014).....	18
Andrew Scott, <i>Taking a Bite Out of Forensic Science: The Misuse of Accelerant-Detecting Dogs in Arson Cases</i> , 48 J. MARSHALL L. REV. 1149 (2015) .....	16
Armen H. Merjian, <i>Anatomy of a Wrongful Conviction: State v. Dedge and What It Tells Us About Our Flawed Criminal Justice System</i> , 13 UNIV. PENN. J. LAW & SOCIAL CHANGE 137 (2010) .....	14
C. Michael Bowers, <i>Problem-Based Analysis of Bitemark Misidentifications</i> , 159S FORENSIC SCI. INT’L S104 (2006).....	10, 11
<i>Daubert v. Frye, State Admissibility Standard, Rules of Evidence in 2017</i> , EXPERT INSTITUTE (2017).....	19

## TABLE OF AUTHORITIES

<b>OTHER AUTHORITIES</b>	<b>Page</b>
Erica Beecher-Monas, <i>Reality Bites: The Illusion of Science in Bite-Mark Evidence</i> , 30 CARDOZO L. REV. 1369 (2009).....	11
FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review (2015) .....	13
Hon. Alex Kozinski, <i>Criminal Law 2.0</i> , 44 GEO. L.J. ANN. REV. CRIM. PROC. iii (2015).....	15
Innocence Project and NACDL Announce Historic Partnership with the FBI and Department of Justice on Microscopic Hair Analysis Cases (2013).....	13
John Torres, <i>Torres: Another Milestone Behind Bars</i> , FLORIDA TODAY, June 1, 2017.....	15
Keith Findley, <i>Reforming the “Science” in Forensic Science</i> 88 WIS. LAWYER NO. 10 (2015) .....	10, 15
M. Chris Fabricant & Tucker Carrington, <i>The Shifted Paradigm: Forensic Science’s Overdue Evolution From Magic to Law</i> 4:1 VA. J. CRIM. L. 1 (2016).....	11, 12, 14, 17
Nat’l Research Council of the Nat’l Academies of Sciences, <i>Strengthening Forensic Science in the United States: A Path Forward</i> (2009).....	10, 11, 12, 15
Norman L. Reimer, <i>The Hair Microscopy Review Project: An Historic Breakthrough for Law Enforcement and a Daunting Challenge for the Defense Bar</i> , THE CHAMPION, July 2013.....	13
Rachel Dioso-Villa, <i>Scientific and Legal Developments in Fire and Arson Investigation Expertise in Texas v. Willingham</i> , 14 MINN. J. L. SCI. & TECH. 817 (2013).....	15
Radley Balko, <i>How the Flawed “Science” of Bite Mark Analysis has Sent Innocent People to Prison</i> , WASH. POST, Feb. 13, 2015.....	9, 11

## TABLE OF AUTHORITIES

<b>OTHER AUTHORITIES</b>	<b>Page</b>
Radley Balko, <i>It Literally Started with a Witch Hunt: A History of Bite Mark Evidence</i> , WASH. POST, Feb. 17, 2015.....	10
Radley Balko, <i>The Path Forward on Bite Mark Matching – and the Rearview Mirror</i> , WASH. POST, Feb. 20, 2015 .....	17
Scott Maxwell, <i>Commentary: Brevard’s Wrongful Convictions Still Need Probing</i> , ORLANDO SENTINEL, Mar. 28, 2017 .....	14, 15
Spencer S. Hsu, <i>FBI Admits Flaws in Hair Analysis Over Decades</i> , WASH. POST, Apr. 18, 2015 .....	14
Stephen E. Mahle, <i>The “Pure Opinion” Exception to the Florida Frye Standard</i> , 86 FLA. B. J. 41 (2012).....	5, 6
Victor E. Schwartz & Leah Lorber, <i>A Letter to the Nation’s Trial Judges: How the Focus on Efficiency Is Hurting You and Innocent Victims in Asbestos Liability Cases</i> , 24 AM. J. TRIAL ADVOC. 247 (2000).....	6

## **IDENTITY & INTEREST OF *AMICUS CURIAE***

The National Association of Criminal Defense Lawyers (NACDL) is a nonprofit voluntary professional bar association that works on behalf of criminal defense attorneys to ensure justice and due process for those accused of crime or misconduct. Founded in 1958, NACDL has a nationwide membership of many thousands of direct members, and up to 40,000 with affiliates. NACDL's members include private criminal defense lawyers, public defenders, military defense counsel, law professors, and judges. NACDL is dedicated to advancing the proper, efficient, and just administration of justice.

NACDL has long decried the use of flawed forensic evidence and endorsed the *Daubert* standard when, in 2010, it published a compendium of recommendations relating to the scientific integrity of forensic evidence. Since 2013, to improve the reliability of forensic evidence, NACDL has been working with the U.S. Department of Justice, the Federal Bureau of Investigation and the Innocence Project on an unprecedented review to identify cases in which testimony or reports of microscopic hair analysis exceeded the limits of science. Additionally, NACDL regularly submits comments to various governmental entities considering forensic science reform.

A primary concern for NACDL in all of its commentary is the risk of wrongful conviction, which is linked to the admission of flawed scientific evidence under



standards like *Frye*, and which underscores the importance of applying the *Daubert* standard. In this case, the Court is presented with the opportunity to decide once and for all whether *Daubert* or *Frye* will govern the admission of expert evidence in Florida in all cases—not just civil cases. This brief explains why the Court should uphold the *Daubert* standard, as the application of *Daubert* will go a long way in providing more reliable criminal justice outcomes and diminishing the number of wrongful convictions.

### **SUMMARY OF ARGUMENT**

In this case this Court has the opportunity to adopt the expert-evidence standard which best screens evidence for reliability. The standard set forth nearly 100 years ago by *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), cannot ensure reliability because it does not test for reliability; it simply asks whether a technique or discipline is “generally accepted”. In contrast, under *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), and its progeny, the court conducts a genuine inquiry into scientific validity using an explicit set of factors, general acceptance being just one indicia of reliability.

In addition, *Frye* only applies to “new or novel” scientific techniques and has no application to “pure opinion” testimony, thereby excluding the vast majority of cases from any type of judicial scrutiny. Courts applying *Frye* are also precluded from considering the expert’s actual opinions, or even the reasoning underlying an

expert's opinions. *Daubert*, on the other hand, applies to all expert testimony and considers all facets of expert evidence. And courts applying *Daubert* use their gatekeeping function to ensure that testimony is reliable before it is admitted into evidence.

Numerous courts around the country (including in Florida) have admitted unreliable evidence by following the *Frye* standard. These *Frye* courts have consistently admitted “junk science” forensics, such as bite mark analysis, hair microscopy and dog scent identification, sending countless defendants to prison, many of whom were later exonerated by DNA evidence. *Daubert* will not entirely eliminate wrongful convictions based on questionable scientific evidence, but if this Court is to serve as the gatekeeper for the admission of *reliable* evidence, the Court clearly benefits by employing *Daubert*. *Daubert* ensures that both sides are confronted with only reliable expert evidence in the courtroom. *Frye* does not. The federal courts and an overwhelming majority of state courts have already recognized *Daubert's* benefits over *Frye*. It is time for Florida to join the majority and employ the *Daubert* standard as a means of consistently admitting reliable evidence so that Florida criminal defendants will face conviction only when confronted by the best scientific standard available.

## ARGUMENT

### **The *Daubert* Standard Is Superior To *Frye* For Ensuring The Reliability Of Expert Evidence And Preventing Wrongful Convictions**

#### **A. Unlike *Frye*, Expert Testimony Under *Daubert* Must Be Based On More Than “Pure Opinion”**

This Court has acknowledged that reliability is the cornerstone of the admissibility of evidence, and that courts must “not permit cases to be resolved on the basis of evidence for which a predicate of reliability has not been established.” *Hadden v. State*, 690 So. 2d 573, 578 (Fla. 1997). However, the *Frye* standard allows a large class of testimony – based on “pure opinion” – to be admitted into evidence without any real judicial scrutiny. *Frye* has no application to “pure opinion testimony”, which is based solely on the expert’s training and experience. *Marsh v. Valyou*, 977 So. 2d 543, 548-49 (Fla. 2007).

Pure opinion testimony is analyzed by the jury as it analyzes any other personal opinion or factual testimony by a witness – which is precisely the problem. *Id.* at 549. It forces juries to sort out often questionable scientific evidence. As the U.S. Court of Appeals for the Eleventh Circuit has recognized, the Supreme Court has obviously deemed meticulous *Daubert* inquiries “less objectionable than dumping a barrage of questionable scientific evidence on a jury, who would likely be even less equipped than the judge to make reliability and relevance

determinations and more likely than the judge to be awestruck by the expert's mystique". *Allison v. McGhan Med. Corp.*, 184 F. 3d 1300, 1310 (11th Cir. 1999).

Perhaps the case that best exemplifies *Frye*'s shortcomings in this regard is *Hood v. Matrixx Initiatives, Inc.*, 50 So. 3d 1166 (Fla. 4th DCA 2010). In *Hood*, the Fourth District felt "compelled" to admit expert testimony under the "pure opinion" exception without any judicial scrutiny – notwithstanding the fact that the expert in question had been uniformly rejected by *seven* federal courts as unreliable. *Id.* at 1175.

In contrast, under *Daubert*, testimony that is supported only by the expert's training and experience is derided as being the mere "ipse dixit" of the expert. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 157 (1999). It is well settled under *Daubert* that "ipse dixit" expert testimony is generally automatically excluded, no matter how well qualified the expert. See Stephen E. Mahle, *The "Pure Opinion" Exception to the Florida Frye Standard*, 86 FLA. B. J. 41, 43 (2012). *Daubert* ensures "that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire Co.*, 526 U.S. at 152. In other words, there must be something that supports the expert's opinion other than the expert's opinion. See Mahle, *supra*, at 43; *McClain v. Metabolife, Int'l, Inc.*, 401 F. 3d 1233, 1244 (11th Cir. 2005) ("The trial court's

gatekeeping function requires more than simply ‘taking the expert’s word for it.’” (quoting Fed. R. Evid. 702 advisory committee’s note)).

While those in the civil bar are concerned about forum shopping<sup>1</sup>, the same concern applies to Florida criminal cases. In other words, there should be concern about law enforcement’s ability to forum shop its prosecutions against Floridians from a *Daubert* standard in federal prosecutions to a less rigorous standard for the same crime in a state prosecution. Compelled by concerns of public policy, the Legislature adopted *Daubert* “to tighten the rules for admissibility of expert testimony in the courts of this state”. *Perez v. Bell S. Telecomm., Inc.*, 138 So. 3d 492, 497 (Fla. 3d DCA 2014).

**B. Unlike *Frye*, Which Is Limited To Considering The Expert’s Methodology, *Daubert* Evaluates The Reliability Of An Expert’s Methodology, Reasoning And Opinions**

Another severe deficiency of *Frye* is that trial courts are limited to considering whether the expert’s methodology and scientific principles have been generally

---

<sup>1</sup> See e.g., Mahle, *supra*, at 41 (“[E]ntrepreneurial lawyers and their clients are incentivized by [the *Frye* pure-opinion exception] to move litigation to Florida that is based on unreliable expert testimony from jurisdictions that do not admit similar expert testimony as casually as Florida.”); Victor E. Schwartz & Leah Lorber, *A Letter to the Nation’s Trial Judges: How the Focus on Efficiency Is Hurting You and Innocent Victims in Asbestos Liability Cases*, 24 AM. J. TRIAL ADVOC. 247, 270-71 (2000) (“State judges who refuse to act as gatekeepers encourage the use of forum shopping. If a plaintiff has a questionable expert, and the state court will allow the expert to testify but the federal court will not, the plaintiff’s lawyer will do everything in his power to oust the federal court of jurisdiction.”).

accepted. *Castillo v. E.I. du Pont de Nemours & Co.*, 854 So. 2d 1264, 1276 (Fla. 2003). Under *Frye*, the courts are precluded from considering the expert's actual opinions, or even the reasoning underlying an expert's opinions, which are to be assessed by the jury as a matter of weight, not admissibility. *See id.* (criticizing the Third District, which engaged in "essentially a *Daubert* analysis" by focusing on the expert's reasoning); *Gelsthorpe v. Weinstein*, 897 So. 2d 504, 509 (Fla. 2d DCA 2005) (explaining that an expert's deductions need not be generally accepted, and that they are to be assessed as a matter of weight). This approach leaves jurors with the arduous task of resolving basic reliability determinations, which as the courts have recognized, juries are often ill-equipped to make. *Allison*, 184 F. 3d at 1310.

In contrast, courts applying *Daubert* make these basic reliability determinations *before* the testimony is given to the jury. *Id.* In particular, *Daubert* courts "must do a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue". *Chapman v. Procter & Gamble Distrib., LLC*, 766 F. 3d 1296, 1306 (11th Cir. 2014) (internal quotations and citations omitted); *see also Perez*, 138 So. 3d at 497; §90.702, Fla. Stat. Consequently, under *Daubert*, all facets of expert evidence, including the expert's methodology, reasoning and opinions, are encompassed among the factors that the courts are to consider as part of their gatekeeping function. *Chapman*, 766 F. 3d at

1306. While general acceptance can have a bearing on the inquiry into reliability, under *Daubert*, it is just one factor among many. *Perez*, 138 So. 3d at 498.

**C. Unlike *Daubert*, Which Applies to All Expert Testimony, *Frye* Only Applies to “New or Novel” Scientific Techniques**

While *Daubert* applies to **all** expert testimony (*Kumho Tire*, 526 U.S. at 147-49), *Frye* only applies to “new or novel scientific techniques.” *Marsh*, 977 So. 2d at 547. Thus, another significant deficiency of *Frye* is that in the vast majority of cases (i.e., all cases that do not involve new or novel evidence), the unreliability of expert evidence poses no bar to its use in the courtroom. *See King v. State*, 89 So. 3d 209, 228 (Fla. 2012).

And since *Frye* only focuses on general acceptance, *Frye* bars the admission of evidence that is too new to have attained general acceptance despite being demonstrably reliable. As the First District has noted, “[t]his creates a ‘cultural lag’ during the technique’s development, requiring that relevant evidence which might be demonstrated to be completely reliable must be excluded from consideration.” *Brown v. State*, 426 So. 2d 76, 88 n.17 (Fla. 1st DCA 1983), *disapproved on other grounds*, *Bundy v. State*, 471 So. 2d 9, 17 (Fla. 1985).

**D. A Number of Unreliable Forensic Techniques Are Admitted Under *Frye* Because They Are No Longer New or Novel**

Much more troubling is the fact that once a science or discipline is “generally accepted”, it is no longer new or novel and will continue to be admitted under *Frye*, even if it later proves to be unreliable. The Supreme Court in *Kumho Tire* recognized this flaw, noting that general acceptance might admit the principles of an unreliable discipline, such as “astrology or necromancy”. 526 U.S. at 151. But there is no need to theorize. As discussed in further detail below, our jurisprudence is replete with examples of unreliable forensic disciplines, such as bite mark analysis, hair microscopy and dog scent identification, that have been, and continue to be, admitted into evidence without any judicial scrutiny. Since these forensic techniques are generally used in criminal prosecutions, the application of *Frye* increases the risk of wrongful convictions.

**1) Forensic Odontology (Bite Mark Analysis)**

“There is no better example of the pitfalls of allowing junk science into the criminal justice system than bite mark analysis.” Radley Balko, *How the Flawed “Science” of Bite Mark Analysis has Sent Innocent People to Prison*, WASH. POST, Feb. 13, 2015, at 4. Bite mark analysis, which attempts to trace marks on a victim with the dentition of the perpetrator, has been used in American courts since 1954. C. Michael Bowers, *Problem-Based Analysis of Bitemark Misidentifications*, 159S



FORENSIC SCI. INT'L S104, S105 (2006). And it became so “generally accepted” in courtrooms that a *Frye* analysis was no longer necessary. Radley Balko, *It Literally Started with a Witch Hunt: A History of Bite Mark Evidence*, WASH. POST, Feb. 17, 2015, at 5.

In 2009, the National Academy of Sciences (“NAS”), the preeminent scientific authority in the United States, published a congressionally commissioned, groundbreaking report.<sup>2</sup> The NAS Report concluded that with the exception of DNA testing, all other forensic identification disciplines (i.e., those whose objective is to match evidentiary traces found on crime scene evidence to a particular individual) lack adequate scientific foundation. *See* NAS Report at 7 – 8; *see also* Keith Findley, *Reforming the “Science” in Forensic Science*, 88 WIS. LAWYER NO. 10, at 2-3 (2015) (discussing the fact that multiple forensic techniques have been labeled by the NAS as “fundamentally unscientific” and exposed as “essentially junk sciences, which laboratories are abandoning”). The NAS Report was especially critical of bite mark analysis:

Although the majority of forensic odontologists are satisfied that bite marks can demonstrate sufficient detail for positive identification, *no scientific studies support this assessment*, and no large population studies have been conducted. In numerous instances, *experts diverge widely in their evaluations of the same bite mark evidence*, which has

---

<sup>2</sup> *See* Nat'l Research Council of the Nat'l Academies of Sciences, *Strengthening Forensic Science in the United States: A Path Forward* (2009), available at <http://www.nap.edu/catalog/12589.html> (“NAS Report”).

led to questioning of the value and scientific objectivity of such evidence.

NAS Report at 176 (emphasis added, footnotes omitted).

The NAS Report concluded that there is “no evidence of an existing scientific basis for identifying an individual to the exclusion of all others” using bite mark evidence. *Id.*; see also Bowers, *supra*, at S106-07 (lambasting the “disturbingly high false-positive error rate” of bite mark matching, as evidenced in part by a study by the American Board of Forensic Odontology which found 63.5% false positives). Since the NAS Report, a 2013 investigation by the Associated Press revealed that at least twenty four innocent men whose convictions and/or indictments were obtained using bite mark evidence have been exonerated since 2000. M. Chris Fabricant & Tucker Carrington, *The Shifted Paradigm: Forensic Science’s Overdue Evolution From Magic to Law*, 4:1 VA. J. CRIM. L 1, 22, 105 n. 413 (2016). It is estimated that there are hundreds more still in prison due to bite mark testimony, including at least fifteen on death row. Balko, *supra*, Feb. 13, 2015, at 4.

Yet, when challenged in court, bite mark analysis is nearly always found to be admissible, generally because other courts have done so or because it’s not new or novel. See Erica Beecher-Monas, *Reality Bites: The Illusion of Science in Bite-Mark Evidence*, 30 CARDOZO L. REV. 1369, 1371-74, 1390, 1395-96 (2009); Fabricant & Carrington, *supra*, at 56-58 (discussing an “echo chamber of ill-

considered [bite mark] opinions” over four decades).<sup>3</sup> Florida is no exception. *See, e.g., Boyd v. State*, 200 So. 3d 685, 704 (Fla. 2015) (holding that bite mark analysis is neither new nor novel, and therefore, a *Frye* hearing was not necessary); *Mitchell v. State*, 527 So. 2d 179, 181 (Fla. 1988) (noting the Court’s previous approval of bite mark testimony); *Bundy v. State*, 455 So. 2d 330, 349 (Fla. 1984) (citing *People v. Marx* for the proposition that bite mark evidence is an “established science”).<sup>4</sup>

## 2) Hair Microscopy (Microscopic Hair Comparison)

Hair microscopy (or microscopic hair comparison), which attempts to link hair from a suspect and a hair found at a crime scene through side-by-side microscopic examination, is another forensic technique that, while used in courts for decades, is now recognized as “highly unreliable”. Fabricant & Carrington, *supra*, at 63, 91-92; NAS Report at 161 (concluding, in part, that “testimony linking microscopic hair analysis with particular defendants [was] **highly unreliable**”, and that evidence of a match “must be confirmed using mtDNA analysis” (emphasis added)).

---

<sup>3</sup> Indeed, some states still cite as precedent cases in which the defendants involved were later exonerated by DNA evidence. *See Fabricant & Carrington, supra*, at 7-10 (noting that *State v. Brooks* and *State v. Stinson* are still the controlling precedent for bite mark evidence in Mississippi and Wisconsin, even though the men in those cases spent a combined 39 years in prison before DNA testing exonerated them).

<sup>4</sup> *People v. Marx* is the first reported case to consider the admissibility of bite mark evidence, but in that case, the court itself stated there was “no established science of identifying persons from bite marks”. 126 Cal. Rptr. 350, 353 (Cal. Ct. App. 1975).

In 2013, the FBI and the Department of Justice launched an unprecedented collaboration with NACDL and the Innocence Project to conduct a systematic review to identify cases in which testimony or reports on microscopic hair analysis exceeded the limits of science.<sup>5</sup> In April 2015, the FBI revealed an error rate of 96% in a sample of 268 cases in which hair microscopy testimony was used to secure a conviction, including an error rate of 94% (or 33 of 35 cases) where defendants had received the death penalty.<sup>6</sup> These alarming statistics prompted the Justice Department and FBI to formally acknowledge the unreliability of microscopic hair comparison, which is now only used in conjunction with DNA testing. *Id.* at 1, 3. These findings “likely scratch the surface”, as reviews of hundreds, if not thousands, of additional cases remain. Spencer S. Hsu, *FBI Admits Flaws in Hair Analysis Over Decades*, WASH. POST, Apr. 18, 2015 at 4.

---

<sup>5</sup> Innocence Project and NACDL Announce Historic Partnership with the FBI and Department of Justice on Microscopic Hair Analysis Cases (2013), <https://www.nacdl.org/NewsReleases.aspx?id=28565> (last visited Oct. 30, 2017); see also Norman L. Reimer, *The Hair Microscopy Review Project: An Historic Breakthrough for Law Enforcement and a Daunting Challenge for the Defense Bar*, THE CHAMPION, July 2013, at 16.

<sup>6</sup> FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review (2015), <https://www.fbi.gov/news/pressrel/press-releases/fbi-testimony-on-microscopic-hair-analysis-contained-errors-in-at-least-90-percent-of-cases-in-ongoing-review> (last visited Oct. 30, 2017).

As with bite mark testimony, hair microscopy testimony has frequently been admitted, including in Florida, based on judicial precedent or because it's not new or novel. *See* Fabricant & Carrington, *supra*, at 66-70; *Murray v. State*, 3 So. 2d 1108, 1117 (Fla. 2009) (*Frye* hearing not necessary as microscopic hair comparison is not new or novel); *accord McDonald v. State*, 952 So. 2d 484, 498 (Fla. 2006).

### **3) Numerous Other Forensic Techniques Which Are Admitted In Courtrooms Because They Are Not New or Novel Lack An Adequate Scientific Basis**

A number of other forensic techniques have also been admitted in courtrooms for decades on the basis that they are not new or novel, despite lacking an adequate scientific basis. By way of example, these techniques include:

- Dog scent identification. *See* Armen H. Merjian, *Anatomy of a Wrongful Conviction: State v. Dedge and What It Tells Us About Our Flawed Criminal Justice System*, 13 UNIV. PENN. J. LAW & SOCIAL CHANGE 137, 142-145, 151, 159, 165-166 (2010) (discussing the “outrageous and unsupported” testimony of John Preston, a dog handler who provided dog scent testimony across the country, particularly in Brevard County, Florida, which led to the wrongful convictions of multiple men, including Wilton Dedge, Juan Ramos and William Dillon, who spent a combined 54 years in prison before they were exonerated, and noting that an investigation in the mid-1980’s revealed that Preston’s dogs were “clearly wrong” in another 40 incidents);<sup>7</sup>

---

<sup>7</sup> Preston, who died in 2008, was declared by Judges in two states as a “charlatan” or fraud (*see e.g., State v. Roscoe*, 910 P. 2d 635, 640 n. 1 (Ariz. 1996)), but it is estimated that dozens of men were wrongfully convicted based on his testimony. *See* Scott Maxwell, *Commentary: Brevard’s Wrongful Convictions Still Need Probing*, ORLANDO SENTINEL, Mar. 28, 2017; John Torres, *Torres: Another Milestone Behind Bars*, FLORIDA TODAY, June 1, 2017 (discussing the case of Gary Bennett, who is still in prison after serving 34 years of a life sentence based on Preston’s testimony).

- Shoeprint and tire tracks analysis. *See* NAS Report, *supra*, at 145-46 (noting that identifications based on shoeprints and tire tracks are “largely subjective”);
- Bullet-lead matching. *See* Findley, *supra*, at 3 (noting that by 2005, the FBI abandoned bullet-lead matching altogether, and by 2007, the FBI conceded that any testimony suggesting that this technique could identify a bullet as coming from any particular box of bullets was insupportable);
- Handwriting analysis. *See* NAS Report, *supra*, at 166 (concluding that “[t]he scientific basis for handwriting comparisons ‘needs to be strengthened’”);
- Arson forensics. *See* NAS Report, *supra*, at 172-73 (finding that “[d]espite the paucity of research, some arson investigators continue to make determinations about whether a particular fire was set”, and that “many of the rules of thumb that are typically assumed to indicate that an accelerant was used . . . have been shown not to be true”); Rachel Dioso-Villa, *Scientific and Legal Developments in Fire and Arson Investigation Expertise in Texas v. Willingham*, 14 Minn. J. L. Sci. & Tech. 817, 827-828 (2013) (noting that fire investigation is a subjective process that lacks a scientific foundation for many of the methods used); and
- Bloodstain pattern analysis. *See* NAS Report, *supra*, at 178-79 (finding that “[i]n general, the opinions of bloodstain pattern analysts are more subjective than scientific”, and that “[t]he uncertainties associated with bloodstain pattern analysis are enormous”).<sup>8</sup>

---

<sup>8</sup> *See also* Hon. Alex Kozinski, *Criminal Law 2.0*, 44 GEO. L.J. ANN. REV. CRIM. PROC. iii, iv-v (2015) (noting that a number of forensic disciplines, long accepted by the courts, have been the subject of considerable doubt or skepticism, including bloodstain pattern identification, foot and tire print identification, ballistics, handwriting analysis, canines and arson).

Since these techniques are deemed neither new nor novel, they are not subject to any judicial scrutiny or analysis in Florida courts under *Frye*. In other words, although these flawed processes have been rejected or questioned in large part by the scientific community, they are not even subject to review under *Frye*. See e.g., *Fones v. State*, 765 So. 2d 849, 850 (Fla. 4th DCA 2000) (the use of dogs to detect accelerants is not a new or novel scientific principle, and therefore, the court did not err in failing to conduct a *Frye* hearing); *Ibar v. State*, 938 So. 2d 451, 467-68 (Fla. 2006) (shoeprint evidence not subject to *Frye* analysis since it has been used for over 100 years and is not new or novel); *Foster v. State*, 132 So. 3d 40, 69 (Fla. 2013) (*Frye* hearing not required for ballistics evidence which is not new or novel); *Spann v. State*, 857 So. 2d 845, 852-53 (Fla. 2003) (*Frye* hearing not required for handwriting analysis, which has been utilized by the courts since before *Frye* was decided in 1923); *Anderson v. State*, 220 So. 3d 1133, 1145-46 (Fla. 2017) (*Frye* hearing not required for pattern impression analysis which is not new or novel).<sup>9</sup>

---

<sup>9</sup> The forensic techniques discussed in this brief still have the potential to provide probative information to advance a criminal investigation, even if they may not be sufficiently grounded in science to be admissible under *Daubert*. See Andrew Scott, *Taking a Bite Out of Forensic Science: The Misuse of Accelerant-Detecting Dogs in Arson Cases*, 48 J. MARSHALL L. REV. 1149, 1170-72 (2015) (discussing the various ways that accelerant-detecting canines can assist arson investigations, even though positive alerts by canines that are unable to be confirmed by lab tests should be excluded from trials).

**E. The *Frye* Standard, Which Measures General Acceptance By the Insular Community In Question, Exacerbates The Problem Of Junk Science**

The *Frye* standard exacerbates the problem of junk science. Whereas general acceptance in the scientific community is just *one factor* under *Daubert* (*Perez*, 138 So. 3d at 497), *Frye* simply looks at general acceptance by relevant members of the particular field. *Spann v. State*, 857 So. 2d 845, 852 (Fla. 2000). And when the only relevant field is the insular community in question rather than the larger scientific community, general acceptance is easy to attain, even for techniques later proven to be unreliable, thereby making it exceedingly difficult to rid the courts of junk science. See Fabricant & Carrington, *supra*, at 59 (“The self-referential and self-interested [bite mark] community essentially resulted in the question of the field’s admissibility being a foregone conclusion”); Balko, *supra*, Feb. 20, 2015, at 4 (explaining that with the *Frye* hearings on voiceprint identification, “when judges limited the relevant scientific community to other voiceprint analysts, they upheld the testimony every time”, but “[w]hen they defined the relevant scientific community more broadly, they rejected it every time”).

The application of *Daubert* will not eliminate wrongful convictions based on questionable scientific evidence. But if this Court is to serve as the gatekeeper for the admission of *reliable* evidence, the Court clearly benefits by employing the standard that directly tests whether evidence is reliable. As the U.S. Court of



Appeals for the Eleventh Circuit has said, by “shifting the focus to the kind of empirically supported, rationally explained reasoning required in science,” the *Daubert* approach “has greatly improved the quality of evidence upon which juries base their verdicts”. *Rider v. Sandoz Pharms. Corp.*, 295 F. 3d 1194, 1197 (11th Cir. 2002). When a defendant’s liberty is at stake, we must do all we can to “greatly improve the quality of evidence”.

The critical difference is that *Daubert* succeeds where *Frye* fails, in ensuring only reliable expert evidence is presented in the courtroom. *Daubert* provides neither the prosecution nor the defense with any unfair advantage. Rather, it promotes fairness for all. A flawed prosecution expert, whose testimony is based on junk science, will be excluded to protect a criminal defendant from wrongful incarceration, thereby enhancing a defendant’s right to a fair trial.

*Daubert* has governed the admission of expert evidence in federal courts for more than 20 years. This standard or some variation of it has been implemented in the overwhelming majority of jurisdictions since then.<sup>10</sup> The institution of *Daubert*

---

<sup>10</sup> Although the exact count is not universally agreed upon, generally the literature suggests that at least 35 states and the federal system have adopted some form of the *Daubert* standard. See Andrew Flake, Eric Harlan, and James King, *50 State Survey of Applicability of Daubert*, A.B.A. (2014), <https://apps.americanbar.org/litigation/committees/trialevidence/daubert-frye-survey.html> (last visited Oct. 30, 2017) (citing 35 states as adopting *Daubert* or *Daubert*-like standard); *Daubert v. Frye, State Admissibility Standards, Rules of Evidence in 2017*, THE EXPERT INSTITUTE (2017), <https://www.theexpertinstitute.com/daubert-v-frye-a-state-by-state-comparison/>

has not destroyed the right to a jury trial in the federal courts or in the many state courts that follow *Daubert*. Nor have the “burdens” of the *Daubert* standard brought the judicial systems in these jurisdictions to a screeching halt. Importantly, the same is true in this State, which has been governed by the *Daubert* standard for four years since the statutory amendments’ enactment in 2013.

Routine exams for things like chemical testing for heroin or cocaine remain routine. The burden is not “overwhelming”. Perhaps most importantly, *Daubert* is a workable standard that has restored fundamental fairness to Florida courts. The Court should adopt a standard that can ensure reliability through a genuine inquiry into scientific validity: *Daubert*.

### CONCLUSION

In steadfastly applying a nearly 100 year old standard articulated by *Frye*, this Court has respected the importance of precedence. But too often, the *Frye* standard removes judges from the decision of whether expert evidence is reliable. The result has been countless wrongful convictions. *Daubert* rightfully places judges in a position to screen evidence. The result is that juries receive higher quality evidence. The position that any and all expert evidence should be admitted for the jury to weigh, subject to only the determination of whether any “new or novel” technique

---

(last visited Oct. 30, 2017) (citing 39 states as adopting *Daubert* or *Daubert*-like standard).

is “generally accepted,” cannot be squared with this Court’s stated goal of ensuring that all evidence is both relevant and reliable. Precedence cannot trump progress.

The Court should affirm the Fourth District’s decision below and formally adopt *Daubert* as the governing expert-evidence standard in Florida. We cannot put the fate of criminal defendants at the mercy of a recognized flawed standard because it is merely more efficient. When liberty, and even life are at stake, our courts owe it to our citizens to use only the highest and best approach to evidence. Let our state join the jurisprudence of the nation instead of embracing the shameful standard of a “charlatan” dog handler.

Respectfully submitted on October 30, 2017.

H. Eugene Lindsey III  
Florida Bar No. 0130338  
**KATZ BARRON**  
Regional Vice Chair, 11<sup>th</sup> Circuit  
Amicus Committee  
NATIONAL ASSOCIATION OF  
CRIMINAL DEFENSE LAWYERS  
2699 S. Bayshore Drive, 7<sup>th</sup> Floor  
Miami, FL 33133  
Telephone: (305) 856-2444  
Facsimile: (305) 285-9227  
[hel@katzbarron.com](mailto:hel@katzbarron.com)

/s/ Jason D. Lazarus  
William N. Shepherd  
Florida Bar No. 088668  
Jason D. Lazarus  
Florida Bar No. 139040  
Tiffany A. Roddenberry  
Florida Bar No. 092524  
**HOLLAND & KNIGHT LLP**  
222 Lakeview Avenue, Suite 1000  
West Palm Beach, Florida 33401  
Telephone: (561) 833-2000  
Facsimile: (561) 650-8399  
[William.shepherd@hklaw.com](mailto:William.shepherd@hklaw.com)  
[Jason.lazarus@hklaw.com](mailto:Jason.lazarus@hklaw.com)  
[Tiffany.roddenberry@hklaw.com](mailto:Tiffany.roddenberry@hklaw.com)

*Counsel for Amicus Curiae The National Association of Criminal Defense Lawyers*

## CERTIFICATE OF SERVICE

I hereby certify that on October 30, 2017, a copy of this *amicus curiae* brief was filed electronically in this Court and served via registered email to counsel listed below.

James L. Ferraro  
David A. Jagolinzer  
Mark P. Kunen  
Pablo R. Lima  
THE FERRARO LAW FIRM, PA  
600 Brickell Avenue, Suite 3800  
Miami, FL 33131  
[jlf@ferrarolaw.com](mailto:jlf@ferrarolaw.com)  
[daj@ferrarolaw.com](mailto:daj@ferrarolaw.com)  
[mpk@ferrarolaw.com](mailto:mpk@ferrarolaw.com)  
[prl@ferrarolaw.com](mailto:prl@ferrarolaw.com)  
*Counsel for Petitioner*

Gary M. Farmer, Sr.  
FARMER JAFFE WEISSING EDWARDS  
FISTOS & LEHRMAN PL  
42 N. Andrews Avenue, Suite 2  
Ft. Lauderdale, FL 33301  
[Staff.efile@pathtojustice.com](mailto:Staff.efile@pathtojustice.com)  
[farmergm@att.net](mailto:farmergm@att.net)  
*Counsel for Petitioner*

George N. Meros, Jr.  
Andy Bardos  
GRAYROBINSON, P.A.  
Post Office Box 11189  
Tallahassee, FL 32302  
[George.meros@gray-robinson.com](mailto:George.meros@gray-robinson.com)  
[Andy.bardos@gray-robinson.com](mailto:Andy.bardos@gray-robinson.com)  
*Counsel for Florida Justice Reform  
Institute*

Eliot H. Scherker  
Julissa Rodriguez  
Brigid F. Cech Samole  
Sabrina F. Gallo  
Stephanie L. Varela  
GREENBERG TRAURIG, PA  
333 SE 2d Avenue, Suite 4400  
Miami, FL 33131  
[scherkere@gtlaw.com](mailto:scherkere@gtlaw.com)  
[rodriguezju@gtlaw.com](mailto:rodriguezju@gtlaw.com)  
[cechsamoleb@gtlaw.com](mailto:cechsamoleb@gtlaw.com)  
[gallos@gtlaw.com](mailto:gallos@gtlaw.com)  
[varelas@gtlaw.com](mailto:varelas@gtlaw.com)  
[miamiappellateservice@gtlaw.com](mailto:miamiappellateservice@gtlaw.com)  
*Counsel for Respondents R.J.  
Reynolds Tobacco Co. &  
Hollingsworth & Voce Co.*

William J. Simonitsch  
Paul F. Hancock  
K&L GATES LLP  
Southeast Financial Center  
200 S. Biscayne Blvd., Suite 3900  
Miami, FL 33131-2399  
[William.simonitsch@klgates.com](mailto:William.simonitsch@klgates.com)  
[Paul.hancock@klgates.com](mailto:Paul.hancock@klgates.com)  
[cranecofl@klgates.com](mailto:cranecofl@klgates.com)  
*Counsel for Respondent Crane Co.*

Wesley A. Bowden  
LEVIN, PAPANTONIO, THOMAS,  
MITCHELL, RAFFERTY & PROCTOR, PA  
316 S. Baylen Street, Suite 600  
Pensacola, FL 32502  
[wbowden@levinlaw.com](mailto:wbowden@levinlaw.com)  
[kshivers@levinlaw.com](mailto:kshivers@levinlaw.com)  
*Counsel for Concerned Physicians,  
Scientists and Scholars*

Richard E. Doran  
AUSLEY McMULLEN  
123 South Calhoun Street  
Post Office Box 391  
Tallahassee, FL 32302  
[rdoran@ausley.com](mailto:rdoran@ausley.com)  
*Counsel for Respondent Crane Co.*

Kansas R. Gooden  
BOYD & JENERETTE, P.A.  
201 North Hogan Street, Suite 400  
Jacksonville, FL 32202  
[kgooden@boydjen.com](mailto:kgooden@boydjen.com)  
*Counsel for Florida Defense Lawyers  
Association*

Bryan S. Gowdy  
CREED & GOWDY, P.A.  
865 May Street  
Jacksonville, FL 32204  
[Bgowdy@appellate-firm.com](mailto:Bgowdy@appellate-firm.com)  
[filings@appellate-firm.com](mailto:filings@appellate-firm.com)

William W. Large  
FLORIDA JUSTICE REFORM INSTITUTE  
210 South Monroe Street  
Tallahassee, FL 32302  
[william@fljustice.org](mailto:william@fljustice.org)  
*Counsel for Florida Justice Reform  
Institute*  
Cory L. Andrews

WASHINGTON LEGAL FOUNDATION  
2009 Massachusetts Ave., N.W.  
Washington, DC 20036  
[candrews@wlf.org](mailto:candrews@wlf.org)  
*Counsel for Amicus Curiae  
Washington Legal Foundation*

Howard C. Coker  
COKER, SCHICKEL, SORENSON,  
POSGAY, CAMERLENGO & IRACKI  
136 East Bay Street  
Jacksonville, FL 32202  
[hcc@cokerlaw.com](mailto:hcc@cokerlaw.com)  
*Counsel for Florida Justice  
Association*

Joseph H. Varner, III  
HOLLAND & KNIGHT LLP  
Post Office Box 1288  
Tampa, FL 33601  
[Joe.varner@hkclaw.com](mailto:Joe.varner@hkclaw.com)  
[Gloria.mcknight@hkclaw.com](mailto:Gloria.mcknight@hkclaw.com)  
*Counsel for Dr. John Henderson  
Duffus, Professor Thomas A. Kubic,  
Professor Robert Nolan, and  
Professor Emanuel Rubin*

Martin S. Kaufman, *pro hac vice*  
Executive Vice President and General  
Counsel  
ATLANTIC LEGAL FOUNDATION  
500 Mamaroneck Avenue, Suite 320  
Harrison, NY 10528  
[mkaufman@atlanticlegal.org](mailto:mkaufman@atlanticlegal.org)  
*Counsel for Dr. John Henderson  
Duffus, Professor Thomas A. Kubic,  
Professor Robert Nolan, and  
Professor Emanuel Rubin*

/s/ Jason D. Lazarus

**CERTIFICATE OF COMPLIANCE**

I hereby certify that this brief was prepared in Times New Roman, 14-point font, in compliance with Rule 9.210(a)(2) of the Florida Rules of Appellate Procedure.

/s/ Jason D. Lazarus

#54147234\_v1