

NO. AP-75,219

IN THE COURT OF CRIMINAL APPEALS
OF TEXAS AT AUSTIN

NOAH ESPADA,

APPELLANT

vs.

THE STATE OF TEXAS

APPELLEE

Trial Court No. 2004-CR-3638
Appeal from the 379th Judicial District

Bexar County, Texas

The Honorable BERT RICHARDSON, Judge Presiding

BRIEF OF THE *AMICI CURIAE* TEXAS PSYCHOLOGICAL ASSOCIATION
AND TEXAS APPLESEED IN SUPPORT OF APPELLANT

GARDERE WYNNE SEWELL LLP

Michael Lowenberg
Texas Bar No. 12630000
Kevin Colbert
Texas Bar No. 04528550
Lloyd S. van Oostenrijk
Texas Bar No. 24056467
1601 Elm Street, Suite 3000
Dallas, Texas 75201-4761
(214) 999-3000

**ATTORNEYS FOR AMICI CURIAE
TEXAS PSYCHOLOGICAL
ASSOCIATION AND TEXAS APPLESEED**

I. BACKGROUND

Appellant Noah Espada was convicted of two capital offenses. During the sentencing phase of the trial, the prosecution presented a psychiatrist, Dr. Richard Coons, to offer expert opinion testimony regarding the likelihood that Mr. Espada would engage in future acts of violence if he were not executed. Specifically, Dr. Coons concluded: “I believe there is *a probability* that that person would commit criminal acts of violence in the future which would constitute a continuing threat to society.”¹ Dr. Coons quantified his probability to more likely than not.²

Dr. Coons testified that his opinion was focused narrowly on the risk of danger Mr. Espada would present even if incarcerated in a secure correctional setting.³ Dr. Coons based his opinion on his review of records concerning Mr. Espada, as well as an interview with Mr. Espada.⁴ The materials consisted primarily of jail records, including disciplinary records, and records relating to the instant criminal offense.⁵ Dr. Coons based his opinion upon a detailed “hypothetical” question comprised of various “bad acts” that Mr. Espada had committed during his life, as revealed in the institutional records.⁶

¹ R. XXXV: 145 (emphasis added).

² R. XXXV: 149.

³ See R. XXXV: 138 (“So you consider what their society will be. And assuming – these questions come up after somebody has been convicted of capital murder. So they’re either going to be on death row or they’re going to be not on death row in the population.”); R. XXXV: 148 (“Or they will be – this person will be in the – in a population within the jail, the penitentiary.”).

⁴ R. XXXV: 138. Dr. Coons’ testimony, however, was based on a hypothetical and his testimony never referenced the interview with Mr. Espada.

⁵ R. XXXV: 134-136.

⁶ R. XXXV: 139-143.

With regard to the opinion he had formed, Dr. Coons testified that there was no way to determine a rate of error in arriving at a determination of predicting future dangerousness.⁷ Dr. Coons was asked, “Now, have you developed a scientific foundation for your prediction of future dangerousness?” He responded “No.”⁸ He also indicated that he had never analyzed his data applying the scientific method.⁹ Nor had he ever authored a scholarly paper on it.¹⁰ He even acknowledged that he could not know what his rate of error might even be.¹¹ When asked what methodology he does follow, Dr. Coons testified: “I do it my way”¹²

Defense counsel objected to the testimony as unreliable under the standards for expert testimony established by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, as well as those established by this court in *Kelly/Nenno*.¹³ Counsel also argued that Dr. Coons’ methodology of making predictions on future dangerousness was not based upon a scientific foundation of prediction.¹⁴ The district

⁷ R. XXXV: 114.

⁸ R. XXXV: 150.

⁹ R. XXXV: 151.

¹⁰ R. XXXV: 112.

¹¹ R. XXXV: 114.

¹² R. XXXV: 160.

¹³ *Kelly v. State*, 824 S.W.2d 568 (Tex. Crim. App. 1992). To determine whether proffered expert evidence is reliable and thus admissible, this Court in *Kelly* outlined seven non-exclusive factors, later adopted by the Supreme Court in *Daubert*, to assist determinations by trial courts. Those factors are: (1) the extent to which the underlying scientific theory and technique are accepted as valid by the relevant scientific community, if such a community can be ascertained; (2) the qualifications of the expert(s) testifying; (3) the existence of literature supporting or rejecting the underlying scientific theory and technique; (5) the availability of other experts to test and evaluate the technique; (6) the clarity with which the underlying scientific theory and technique can be explained to the court; and (7) the experience and skill of the person(s) who applied the technique on the occasion in question.¹³ See also *Nenno v. State*, 970 S.W.2d 549 (Tex. Crim. App. 1998). In *Nenno*, this Court outlined additional factors for “soft science.” Those factors are: (1) whether the field of expertise is a legitimate one; (2) whether the subject matter of the expert’s testimony is within the scope of that field; and (3) whether the expert’s testimony relies upon the principles involved in that field. *Id.* at 560-562.

¹⁴ R. XXXV: 120.

court overruled the objections and allowed the expert testimony to go to the jury.¹⁵ The jury sentenced Mr. Espada to die by lethal injection.

ARGUMENT

II. DR. COONS' METHODOLOGY AND EXPERT OPINION IN THIS CASE WERE NOT BASED UPON SCIENCE BUT DONE "MY WAY;" HOWEVER, HIS TESTIMONY LIKELY HAD A SUBSTANTIAL INFLUENCE ON THE JURY.

A. A Significant Amount of Study Has Been Done Regarding the Reliability of Predictions of Future Dangerousness, Which Shows That Predictions Not Based on Scientific Methods Are Unreliable.

There is a tremendous amount of scientific study regarding the ability of psychologists and psychiatrists to predict the likelihood that a specific individual will commit future acts of violence. Most of the early studies that were done failed to find any reliable way that such predictions could be made.¹⁶ Indeed, an early review of this "first generation" research found that when mental health professionals assess risk for future danger, they will be accurate only one out of three times when they predict that an individual will be violence in the future.¹⁷ Based largely upon early studies of this kind, the American Psychiatric Association concluded in an amicus brief filed in 1982 that "[p]sychiatrists should not be permitted to offer a prediction concerning the long-term future dangerousness of a defendant in a capital case, at least in those circumstances

¹⁵ R. XXXV: 127.

¹⁶ See, e.g., Gary B. Melton, et al., *Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers* 280-81 (2d ed. 1997); Christopher Slobogin, *Dangerousness and Expertise*, 133 U. PA. L. REV. 97, 110-11 (1984).

¹⁷ John Monahan, U.S. Dep't of Health & Human Serv., *The Clinical Prediction of Violent Behavior* 47-49 (1981).

where the psychiatrist purports to be testifying as a medical expert possessing predictive expertise in this area.”¹⁸

One important reason that early studies were unable to establish a reliable basis for predictions of “future dangerousness”¹⁹ was that the predictions being reviewed generally had not been developed using scientific methods, but rather had been based on largely unstructured subjective judgments. The subsequent application of more rigorous scientific methods yielded modestly more accurate predictions of violence risk potential in certain settings, as confirmed by later studies.

Several features of these more rigorous scientific methods that are important to the reliability of any prediction of violence risk potential are noteworthy. First, consideration of the “base rate” of violence is critical. Research has established that error rates for predictions of future violence vary significantly depending on the “base rate,” or the known frequency that a particular behavior will occur within a specified population over

¹⁸ Brief Amicus Curiae for the American Psychiatric Association at 3, *Barefoot v. Estelle*, 463 U.S. 880 (1983) (No. 82-6080), available at: http://www.psych.org/edu/other_res/lib_archives/archives/amicus/82-6080.pdf.

¹⁹ Further confusing the determination [of future dangerousness] is an unfortunate adoption of terminology by the Court and some scholars that treats a “future dangerousness” condensation of this issue as synonymous with probability of criminal acts. Dangerousness, however, is a state or descriptor that arguably applies to virtually all capital offenders, if not almost all violent felons, and thus does little to individualize the application of the death penalty. Stated differently, under what circumstances would a convicted capital murderer not be considered dangerous at sentencing as compared to non-criminal community members? Further, while probability of acts is amenable to both scientific measurement and preventative interventions, “dangerousness” is not. Accordingly, it appears closest to the issue as affirmed in *Jurek*, most amenable to individualized determination, and most accessible to scientific achievement to conceptualize the questions in terms of acts of varying severity in particular contexts rather than as an over-arching state of dangerousness.

Mark. D. Cunningham & Jonathan R. Sorensen, Capital Offenders in Texas Prisons: Rates, Correlates, and An Actuarial Analysis of Violent Misconduct, 31 LAW & HUM. BEHAV. ____ (forthcoming 2007), published online March 23, 2007, available online at <http://springerlink.com/content/985m481p2g371740/?p=f86353e61ac248199ece5e9794463748&pi=2>.

a set period of time.²⁰ The “base rate” of violent behavior in a given group represents the single most important piece of information in any risk assessment, because it indirectly affects the accuracy of predictions of future dangerousness. Studies have shown that if the “base rate” is low (in other words, if the overall occurrence of the event in question is very infrequent), it is particularly difficult to predict a specific occurrence of the event with reliability, and there is a tendency to “over-predict.”²¹

One of the things that researchers did to improve the reliability of predictions of future violence was to increase the “base rate” by broadening the definition of “dangerousness” to include verbal threats, fear-inducing behavior and physical attacks that did not require medical attention or come to the attention of authorities. This methodological change increased the likelihood that an individual reliably could be predicted to fall within the “dangerousness” pool.²² However, this methodological change obviously did not greatly improve the ability to predict a “criminal act of violence that would constitute a continuing threat to society.”²³

A second technique through which researchers have been able to improve the reliability of predictions of future dangerousness is through the identification of specific “risk factors” that are correlated with either general recidivism²⁴ or violent recidivism²⁵

²⁰ See Randy Borum, *Improving the Clinical Practice of Violence Risk Assessment: Technology, Guidelines, and Training*, 51 AM. PSYCHOLOGIST 945, 946-47 (1996).

²¹ Monahan, *Clinical Prediction*, *supra*, at 33 (“[I]t is virtually impossible to predict any ‘low base rate’ event without at the same time erroneously pointing the finger at many ‘false positives.’”).

²² Randy K. Otto, *Prediction of Dangerous Behavior: A Review and Analysis of “Second Generation” Research*, 5 FORENSIC REPS. 103, 109-11, 114 (1992).

²³ TEX. CODE CRIM. PROC. art. 37.071 § 2(b)(1).

²⁴ “General recidivism” is the occurrence of a non-violent offense by a former offender.

²⁵ “Violent recidivism” is the occurrence of a violent offense by a former offender.

of individuals released to a community setting.²⁶ At the same time, studies have established that there is *less* recidivism relative to certain other variables.²⁷ And contrary to what might be expected, the most notable of the variables with a negative relationship with future violence is the violent offense index, which reveals that committing a homicide or sexual assault has a weaker association with future violent recidivism than many other factors.²⁸

Researchers have also developed formal assessments or tools to measure such risk factors and thereby enhance the reliability of violence risk assessments. For instance, the HCR-20, a structured professional judgment technique, shows modest to good ability to predict both general and violent recidivism in the community, at least based on studies conducted in Canada and Europe.²⁹ Another risk assessment tool derived and validated predominately with Canadian samples is the Violence Risk Appraisal Guide (VRAG)—an actuarial measure composed of demographic, criminal history, and psychological variables derived from the scientific literature. Again, research indicates moderate to good levels of predictive accuracy, although primarily related to samples consisting predominately of mentally-disordered offenders.³⁰

²⁶ See Monahan, *Clinical Prediction*, *supra* at 71-77; John Monahan, *Violence Risk Assessment*, in 11 *Handbook of Psychology: Forensic Psychology* 527, 532-33 (Alan M. Goldstein ed., 2003); Paul Gendreau et al., *A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works!*, 34 *CRIMINOLOGY* 575, 588 (1996).

²⁷ James Bonta et al., *The Prediction of Criminal and Violent Recidivism Among Mentally Disordered Offenders: A Meta-Analysis*, 123 *PSYCH. BULL.* 123, 124-38 (1998).

²⁸ *Id.* at 127-28.

²⁹ Mairead Dolan & Michael Dolan, *Violence Risk Prediction: Clinical and Actuarial Measures and the Role of the Psychopathy Checklist*, 177 *BRIT. J. PSYCHIATRY* 303, 304-05 (2000); John F. Edens, et al., *Predictions of Future Dangerousness in Capital Murder Trials: Is It Time to “Disinvent the Wheel?”*, 29 *LAW & HUM. BEHAV.* 55, 69 (2005).

³⁰ Dolan & Dolan, *supra*, at 305; Edens et al., *supra*, at 71-72. It should be noted, however, that the HCR-20 and VRAG are useful to describe a *methodology* for scientifically informing risk assessments. These instruments,

A large body of research shows that predictions of future violence based on greater structure and incorporating empirically-grounded methods such as structured professional judgment techniques and actuarial tools generally produce more accurate results than unstructured clinical approaches similar to that employed by Dr. Coons.³¹ However, even under the best circumstances mental health professionals will still make a considerable number of incorrect predictions, with false-positives being the most common type of error.³²

B. The Application of Scientific Methods Has Yielded Important Information Regarding the Ability of Mental Health Professionals to Predict the Occurrence of Violence Within a Secure Prison Setting.

Context is a critical factor in assessing future dangerousness. It is broadly recognized that “predictions of violence concerning settings very different from those in which violence has occurred in the past will be highly subject to error.”³³ In that regard, prison obviously is a fundamentally different context from the community or hospital settings. Assessments of the dangerousness of individuals who will be held in secure correctional settings should incorporate only risk factors and empirical measures that

however, remain experimental even for addressing likelihood of violence in the community; and have not been demonstrated to reliably predict violence in prison.

³¹ Bonta et al, *supra*, at 137; R. Karl Hanson, *What Do We Know About Sex Offender Risk Assessment?*, 4 PSYCHOL., PUB. POL’Y, & L. 50, 54 (1998); Douglas Mossman, *Assessing Predictions of Violence: Being Accurate About Accuracy*, 62 J. CONSULTING & CLINICAL PSYCHOL. 783, 788 (1994).

³² Otto, *supra*, at 128.

³³ Thomas R. Litwack & Louis B. Schlesinger, *Assessing and Predicting Violence: Research, Law, and Applications*, in *Handbook of Forensic Psychology* 205, 214 (Irvin B. Weiner & Allen K. Hess eds., 1987); Mark D. Cunningham & Thomas J. Reidy, *Don’t Confuse Me With the Facts: Common Errors in Violence Risk Assessment at Capital Sentencing*, 26 CRIM. JUST. & BEHAV. 20, 25 (1999).

have been studied in the context of assessing prison-based violence, taking into account prison-based risk management or violence reduction techniques.³⁴

Until recently, very few investigators have examined the reliability of predictions of prison-based violence, the specific type of violence that capital cases typically evoke. The existing psychological and psychiatric literature measures future danger outcomes primarily by acts committed in the community or in civil psychiatric hospitals—environments that are fundamentally different from maximum security correctional facilities, which generally provide much higher levels of management and security than hospitals.

Thus, most of the research that has been conducted regarding the reliability of violence risk assessments has limited applicability to predictions of future dangerousness involving capital defendants. First, as noted above, very few studies have included samples of prisoners, let alone individuals facing a life sentence. Second, most of the “second-generation” studies that revealed modest improvements in the predictive accuracy of risk assessments focused on relatively short-term responses, rather than the long period of time at issue for a capital defendant. Third, the expansion of the definition of “dangerousness” in second-generation studies to include less serious violent acts, such as verbal threats, bears little relationship to the severity of violence that a jury in a capital case should consider before imposing a death sentence to protect the lives and safety of other inmates or prison guards.

³⁴ Mark D. Cunningham & Alan M. Goldstein, *Sentencing Determination in Death Penalty Cases*, in 11 *Handbook of Psychology: Forensic Psychology* 407, 426-28.

Despite these general limitations, certain information recently has been developed regarding the ability to predict future violent behavior by individuals in a secure prison setting. One, it is broadly established that the “base rate” of violence within a secure correctional environment is extremely low.³⁵ With such a low “base rate” of violence, it is highly unlikely that a scientifically reliable opinion can be offered that any individual is “more likely than not” to commit a serious act of violence in that setting, and the “false positive” error rate for such predictions will be exceedingly high.³⁶

Two, investigations recently have been completed which attempt to differentiate those inmates that present an *increased* risk of violence in prison (within the overall low prevalence rate) from those who are at less risk. More specifically, three researchers recently reported the results of a comprehensive study assessing prison violence among maximum security inmates and the reliability of an applied “Risk Assessment Scale for Prison” or RASP.³⁷ The authors studied all inmates detained for at least six months in a specific maximum security prison for men in Missouri during an 11-year period from January 1991 to January 2002. The risk assessment scale developed “was modestly successful at predicting violent misconduct among those maximum security inmates.”³⁸ In another study in which an actuarial approach was employed, researchers estimated the probability of violent prison misconduct for a large sample of Texas capital defendants

³⁵ See, e.g., Jonathan R. Sorensen & Rocky L. Pilgrim, *An Actuarial Risk Assessment of Violence Posed by Capital Murder Defendants*, 90 J. CRIM. L. & CRIMINOLOGY 1251 (2000) (in study of Texas inmates convicted of murder, assessing overall likelihood of inmate-on-inmate homicide of only 0.2% and of aggravated assault on correctional staff member of 1.0% during a 40-year capital life sentence).

³⁶ Borum, *supra*, at 947; Monahan, *Clinical Prediction*, *supra*, at 33.

³⁷ Mark D. Cunningham, et al., *An Actuarial Model for Assessment of Prison Violence Risk Among Maximum Security Inmates*, 12 ASSESSMENT 40, 44-46 (2005).

³⁸ *Id.* at 46.

(excluding inmates sentenced to death).³⁹ Only six risk factors emerged as significantly associated with institutional violence, but individuals meeting all six risk factors had a higher likelihood of future violence than individuals with none of the risk factors.⁴⁰

Significantly, however, these and other studies have established certain counter-intuitive results. For instance, criminal history variables—including past community violence, prior convictions, severity of current offense and escape history—are established predictors of general and violent recidivism in the community but only weakly or inconsistently correlate with prison violence.⁴¹ As the existing research recently was summarized:

[N]either the severity of the offense of conviction nor a history of violence in the community has been consistently associated with prison misconduct or institutional violence. To the contrary, there is counter-intuitive evidence that inmates who have committed more serious offenses in the community and thus face longer prison sentences have more favorable prison adjustments.”⁴²

Specific findings also have been made regarding capital defendants. Significantly, rates of violence by former death-row inmates who were spared execution by commutation, retrial or plea (but still incarcerated) are consistently low across all studies.⁴³ Results of one investigation revealed that two-thirds of a nationwide sample of individuals whose death sentences were commuted between 1972 and 1987 had no disciplinary records for assaultive or violent behavior during the course of their

³⁹ Sorenson & Pilgrim, *supra*.

⁴⁰ *Id.* at 1264-67.

⁴¹ See Nat'l Inst. Of Corrections, U.S. Dep't of Justice, *Jail Classification System Development: A Review of the Literature* 28 (rev. ed. 1992); Jack Alexander & James Austin, *Handbook for Evaluating Objective Prison Classifications* 25 (Nat'l Inst. Of Corrs. 1992).

⁴² Cunningham et al., *supra*, at 42 (internal citations omitted).

⁴³ See Cunningham & Goldstein, *supra*, at 426-27; Thomas J. Reidy et al., *From Death to Life: Prison Behavior of Former Death Row Inmates in Indiana*, 28 CRIM. JUST. & BEHAV. 62, 66 (2001).

subsequent incarceration.⁴⁴ Similarly, low rates of disciplinary write-ups for assaultive or dangerous behavior emerged in a sample of former death row inmates in Indiana while on death row and after transfer to the general population.⁴⁵ Another study established that compared to other inmate groups, including life-sentenced and general population inmates, former Texas capital defendants engage in less violent prison conduct.⁴⁶ The Missouri study described above found that “those sentenced to life or death were only about half as likely to commit violent misconduct compared to parole-eligible inmates sentenced to a term of 20 years or more, holding all other modeled predictor variables constant.”⁴⁷

C. Measured Against the Established Science Regarding Predictions of Future Violence, Dr. Coons’ Methodology and Opinion in This Case Lacked Sufficient Indicia of Reliability to Be Offered to the Jury as Expert Testimony.

Viewed against the established principles set forth above, the work done by Dr. Coons in this case did not satisfy current professional standards regarding the appropriate basis for developing an opinion regarding the future dangerousness of a capital defendant. Dr. Coons did not base his opinion on scientific methods. He did it his way.⁴⁸ His testimony during the sentencing phase of Mr. Espada’s trial offered nothing more than a wholly unstructured, subjective judgment—the type of prediction of “future

⁴⁴ Cunningham & Goldstein, *supra*, at 426-27 (citing James M. Marquart & Jonathan R. Sorensen, *A National Study of the Furman-Commuted Inmates: Assessing the Threat to Society from Capital Offenders*, 23 LOY. L.A. L. REV. 5 (1989)).

⁴⁵ Reidy et al, *supra*, at 70-71.

⁴⁶ See James W. Marquart et al., *Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?*, 23 LAW & SOC’Y REV. 451, 460 (1989).

⁴⁷ Cunningham et al., *supra*, at 44.

⁴⁸ R. XXXV: 160.

dangerousness” that consistently has been shown to be unreliable.⁴⁹ Dr. Coons gave no consideration to applicable base rates of violence, and he concluded without foundation that there was a “probability”⁵⁰ that Mr. Espada, even while incarcerated, would present a “continuing threat to society.”⁵¹

Further, Dr. Coons admitted that his opinion did not derive from statistically analyzed data drawn from valid and reliable research but rather solely from his personal experience.⁵² He reviewed a limited array of records provided by the prosecution.⁵³ He could not identify *any* standard psychiatric or medical procedures used in arriving at a determination or predicting future dangerousness.⁵⁴ He relied on no empirical data.⁵⁵ He could not identify any study that had validated a particular method for assessing future dangerousness, much less any “method” he had used.⁵⁶

Dr. Coons also did not utilize a formal compilation of risk factors or any standardized assessment tool.⁵⁷ He openly admitted that his analysis had a considerable subjective element to it.⁵⁸ Perhaps most significantly, Dr. Coons relied heavily on the nature of the offense of conviction and Mr. Espada’s history of violence after being jailed on these charges, two factors that specifically have been shown *not* to have a high

⁴⁹ Melton et al., *supra*, at 280-81; Monahan, *Clinical Predictions, supra*, at 47-49; Slobogin, *supra*, at 110-11.

⁵⁰ R. XXXV: 145.

⁵¹ *Id.*

⁵² R. XXXV: 119-120.

⁵³ *Id.*

⁵⁴ R. XXXV: 156-159.

⁵⁵ R. XXXV: 134-139.

⁵⁶ R. XXXV: 160. (“I do it my way . . .”).

⁵⁷ R. XXXV: 134-139.

⁵⁸ R. XXXV: 152-155.

correlation with prison misconduct or institutional violence.⁵⁹ Moreover, in addition to relying heavily on risk factors without a demonstrated correlation to institutional violence, Dr. Coons also undermined the importance of risk management influences. He dismissed the protective measures provided by a secure correctional facility as, in his opinion, after the fact issues.

Rather than structuring and presenting his opinion to avoid potential errors and biases, Dr. Coons did nothing to acknowledge to the jury the limitations of his methodology. Rather, Dr. Coons exhibited more confidence in his opinion than is merited.⁶⁰ Dr. Coons explicitly claimed that he does it his way.⁶¹ Yet he also admitted he had testified in about 50 different cases that an individual would be dangerous in the future, and he had *never* made any attempt to go back and determine how often he had been right.⁶²

In effect, Dr. Coons did no more in this case than a lay witness could have done—he compiled a history of Mr. Espada’s prior violent acts and concluded, from those acts, that it was likely that Mr. Espada would commit additional acts of violence in the future. Dr. Coons then extrapolated that conclusion onto a prison setting (where Mr. Espada will concededly be confined if not executed).

For all these reasons, Dr. Coons’ methodology and opinion in this case did not satisfy any recognized criteria for the reliability of expert testimony. Although the

⁵⁹ *Id.*; see also R. XXXV: 107 (“I consider the instant offense.”).

⁶⁰ See Randy Borum et al., *Improving Clinical Judgment and Decision Making in Forensic Evaluation*, 21 J. PSYCHIATRY & L. 35, 49-53 (1993); Daniel W. Shuman & Bruce D. Sales, *The Admissibility of Expert Testimony Based Upon Clinical Judgment and Scientific Research*, 4 PSYCH., PUB. POL’Y, & L. 1226, 1228-29 (1998).

⁶¹ R. XXXV: 160. (“I do it my way . . .”).

⁶² See R. XXXV: 136 (indicating he has testified about 50 times); see also R. XXXV: 151-152.

admittedly subjective “methodology” employed by Dr. Coons has not been tested or subjected to peer review, studies of similar unstructured, subjective predictions of future violence have been shown *not* to be reliable. Dr. Coons acknowledged that he has never studied the rate of error for his predictions of dangerousness, and thus the rate of error for his method is unknown. However, given the established low “base rate” for severe acts of violence within a secure prison setting, particularly by capital defendants, there is every reason to believe that the rate of error for his methodology of predicting dangerousness is exceedingly high. Dr. Coons also acknowledged that he did not utilize any established standards controlling the operation of his technique, and it is clear that his theory for predicting dangerousness in this context has *not* been generally accepted by the scientific community. Rather, he relied heavily on risk factors that the scientific community has shown do not support his hypothesis. Considering all of these criteria, Dr. Coons’ opinion did not satisfy accepted standards of reliability and should not have been admitted in this case.

III. THE *NENNO* STANDARD MAY BE AN INADEQUATE FILTER FOR UNRELIABLE SCIENTIFIC TESTIMONY AND MORE SEARCHING CRITERIA WOULD REVEAL THE UNRELIABILITY OF DR. COONS’ METHODOLOGY.

[B]ecause there is a qualitative difference between death and any other punishment, “there is a corresponding difference in the need for reliability in the determination that death is the appropriate punishment in a specific case.”⁶³

The Texas death penalty statutory scheme was upheld in 1976 because the Supreme Court believed that Texas law allowed the jury to “have before it all possible relevant

⁶³ *Zant v. Stephens*, 462 U.S. 862, 884-885 (1983) (quoting *Woodson v. North Carolina*, 428 U.S. 280, 305 (1976)).

information about the individual defendant whose fate it must determine.”⁶⁴ However, Texas evidentiary rules, as applied in criminal cases, allow unreliable “scientific” testimony to be presented to the jury and, in so doing, may deny criminal defendants their due process rights under the Fourteenth Amendment to the Constitution.

This Court interprets Rule 702 of the Texas Rules of Evidence as distinguishing between “soft” and “hard” science.⁶⁵ This distinction has not always existed and its application in capital cases dilutes the fundamental purpose of *Daubert/Kelly* because of the way the soft science criteria is applied. This distinction between hard and soft science may seem reasonable but if rigidly applied to specific categories of knowledge, may become unhelpful. Expert scientific testimony is either scientific or it is not. And all expert testimony must be reliable, whether scientific, nonscientific, or technical.⁶⁶ This distinction is not unhelpful because it conflicts with *Daubert* and *Robinson*⁶⁷ but because it applies a lower standard to “soft” scientific testimony, especially “soft” scientific testimony regarding future dangerousness upon which a jury will decide to take or spare a criminal defendant’s life. The danger created by the *Nenno* soft science approach is that it may discourage the trial courts from working as vigilant gatekeepers to exclude “expert” testimony that is in fact unreliable.⁶⁸

⁶⁴ *Jurek v. Texas*, 428 U.S. 262, 276 (1976). The purpose of the special issue under *Jurek*—and following in the line of reasoning of other landmark cases that followed *Furman*—is to narrow and particularize (i.e., individualize) the application of the death penalty. As there is always a possibility of future violence for every capital offender, construing the special issue as a “possibility” voids it of this individualizing function.

⁶⁵ See *Nenno v. State*, 970 S.W.2d 549, 560-561 (Tex. Crim. App. 1998).

⁶⁶ TEX. R. EVID. 702.

⁶⁷ *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549 (Tex. 1995).

⁶⁸ R. XXXV: 160 (“I do it my way.”).

As noted recently by the Court of Criminal Appeals, “[r]eliability remains the cornerstone, of not just *Kelly*, but also of all of the scientific evidence cases.”⁶⁹ “[T]he unique nature of scientific evidence derived from soft sciences does not vitiate the *Kelly* requirement of reliability.”⁷⁰ When one examines capital cases involving expert testimony on future dangerousness, however, it seems the same strict standards of reliability are not uniformly applied in capital cases as are applied in civil and non-capital cases.

The testimony of Dr. Coons is not an anomaly. Expert testimony on future dangerousness has long been called into question as scientifically unsound.⁷¹ As noted by Judge Womack in his dissent in *Holiday v. State*, “[i]f it cannot be validated, it’s not science. Not even soft science. It may be soft, as many things are, but it’s not science.”⁷² More recently, Judge Johnson filed a concurring opinion noting that “[a] probability that a single individual will engage in a given behavior does not exist. The probability that *does* exist is the likelihood that a person *like* that individual will engage in a given behavior.”⁷³ Judge Johnson went on to discuss the difference between a probability and a possibility:

Dr. Grigson [in *Barefoot v. Estelle*] may have been committing the common mistake of conflating probability and possibility. Probability does not exist without large numbers of observation[s] of a defined reference group. However, almost anything that does not violate the laws of physics is at least theoretically possible. Possibility does not require numerous

⁶⁹ *State v. Medrano*, 127 S.W.3d 781, 785 (Tex. Crim. App. 2004).

⁷⁰ *Id.*

⁷¹ See Part I.A of this brief, *supra*.

⁷² *Holiday v. State*, Nos. AP-74446, AP-74447, AP-74448, 2006 WL 288661, at *1 (Tex. Crim. App. Feb. 8, 2006) (Womack, J., dissenting).

⁷³ *Allen v. State*, No. AP-74951, 2006 WL 1751227 at *9 (Tex. Crim. App. 2006) (emphasis in the original).

observations because a single attempt may prove the theory. The question for possibility is, can this event happen? The question for probability is, *how often* does this event happen?⁷⁴

While Judge Johnson was referring to Dr. Grigson in *Barefoot*, her observation holds equally true in this case. Dr. Coons testified that there was a *probability* that Mr. Espada would commit a future act of violence not that there was a *possibility*. Yet nowhere in his testimony could Dr. Coons point to any reference group upon which he based his testimony, other than his previous testimony in other cases.⁷⁵

Dr. Coons' conflation of *probability* and *possibility* is crucial because Article 37.071 of the Texas Code of Criminal Procedure requires a jury finding of "whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society."⁷⁶ His unwarranted and incorrect use of the term may be highly misleading to a layperson.

Judge Womack, in *Allen*, asked the pivotal question regarding past predictions of future dangerousness. "How have those earlier predictions turned out?"⁷⁷ Judge Womack laid down the challenge for defense attorneys to begin asking experts regarding future dangerousness if they had ever looked to see how their predictions have turned out.⁷⁸ Mr. Espada's counsel did just that and Dr. Coons acknowledged that he had never followed-up on his own testimony to determine if and when he had been in error.⁷⁹

⁷⁴ *Allen*, 2006 WL 1751227, at *9 (emphasis in the original).

⁷⁵ See R. XXXV: 110-112, 145, 149-153, 159-160 (collectively demonstrating Dr. Coons conflated probability with possibility).

⁷⁶ TEX. CODE CRIM. PROC. ANN. art. 37.071 § 2(b)(1) (Vernon 2006).

⁷⁷ *Allen*, 2006 WL 1751227, at *7.

⁷⁸ *Id.* at *8.

⁷⁹ R. XXXV: 165-166:

In fact, the same type of expert testimony the Court of Criminal Appeals held to be reliable in *Nenno* was recently excluded as unreliable by a federal district court in Maryland.⁸⁰ The district court observed, “there is no known error rate regarding the application of the required predicate of his risk assessment methodology” and concluded that the third *Daubert* factor was not met.⁸¹ The court went so far as to note that “even if the Court had found SSA Clemente’s conclusion reliable, the government would still not have carried its burden in this case.”⁸²

This failure to establish an error rate, combined with Dr. Coons’ conflation between probability and possibility demonstrates why the *Nenno* standard is inadequate in some capital cases. *Nenno*’s relaxed standard of admissibility may allow evidence to be heard even when the witness confuses the issue of possibility versus probability which are critical in this area. This situation is further exacerbated by the fact that this distinction is based on the assumption that soft sciences like psychology and psychiatry do not use “many of the statistical tools used in hard sciences.”⁸³ While this may be true in cases where the ultimate issue is the defendant’s sanity, the same is not true in cases involving predictions of future dangerousness, as is demonstrated in Part I of this brief.

-
- Q. Have you ever followed up on your predictions to determine error rate?
A. Well, I mean I know that a number of the people that I have predicted were going to be dangerous have been dangerous. You lose contact with a lot of them.
Q. So the answer would be no. You don’t have any data or follow-up done?
A. No. I haven’t done a study on that.

Id.

⁸⁰ *Cf. United States v. Thomas*, No. CRIM. CCB-03-0150, 2006 WL 140558 at *18 (D. Md. Jan. 13, 2006) (excluding the testimony of SSA Clemente) *with Nenno v. State*, 970 S.W.2d 549, 552, 560, 561-62 (Tex. Crim. App. 1998) (admitting the testimony of SSA Lanning).

⁸¹ *United States v. Thomas*, 2006 WL 140558 at 19.

⁸² *Id.* at *24.

⁸³ *Mathews v. State*, 40 S.W.3d 179, 184 (Tex. Crim. App. 2001).

The danger created by the *Nenno* standard is that it is too easily interpreted to allow in unreliable evidence. Soft science does not mean soft standards.

IV. THE STATE FAILED TO ESTABLISH DR. COONS' TESTIMONY REGARDING FUTURE DANGEROUSNESS WAS RELIABLE BY CLEAR AND CONVINCING PROOF AS REQUIRED BY *KELLY* AND *NENNO*.

This Court requires the reliability of expert testimony be proven by “clear and convincing proof” in criminal cases.⁸⁴ This is in contrast to the preponderance of the evidence standard employed by the federal rules and in Texas civil cases.⁸⁵ Even though the Court of Criminal Appeals has set forth different criteria for “soft science,” it has never abandoned its requirement that all scientific (“hard” and “soft”) and all non-scientific evidence must be reliable before it can be admitted under any standard.⁸⁶ In fact, as stated by Judge Cochran in her concurring opinion in *Medrano*, “[u]nder our current case law, the standard for *admitting* expert evidence in a criminal trial is higher than the ultimate standard of proof for *upholding* a verdict in a civil trial.”⁸⁷

In light of this Court’s heightened requirement of reliability for expert testimony in criminal cases, the district court should have determined whether Dr. Coons’ testimony was sufficiently reliable within the appropriate scientific community to be offered to the

⁸⁴ See *Weatherred v. State*, 15 S.W.3d 540, 542 (Tex. Crim. App. 2000) (“Under Rule 702, the proponent of scientific evidence must show, by clear and convincing proof, that the evidence he is proffering is sufficiently relevant and reliable to assist the jury in accurately understanding other evidence or in determining a fact in issue.”).

⁸⁵ *State v. Medrano*, 127 S.W.3d 781, 786 (Tex. Crim. App. 2004); *Weatherred v. State*, 15 S.W.3d 540, 542 (Tex. Crim. App. 2000); *Nenno v. State*, 970 S.W.2d 549, 560-561 (Tex. Crim. App. 1998); *Hartman v. State*, 946 S.W.2d 60, 62-63 (Tex. Crim. App. 1997); *Jordan v. State*, 928 S.W.2d 550, 553-555 (Tex. Crim. App. 1996); *Kelly v. State*, 824 S.W.2d 568, 573-73 (Tex. Crim. App. 1992). For purposes of this brief, however, the amici will assume that the reliability of Dr. Coons testimony was not established by either a preponderance of the evidence or clear and convincing proof and should be excluded under either standard.

⁸⁶ *Weatherred*, 15 S.W.3d at 542 (“Under Rule 702, the proponent of scientific evidence must show, by clear and convincing proof, that the evidence his is proffering is sufficiently relevant and reliable to assist the jury in accurately understanding other evidence or in determining a fact in issue.”).

⁸⁷ *Medrano*, 127 S.W.3d at 792 (Cochran, J., concurring) (emphasis in the original).

jury as expert testimony. Instead, the court admitted Dr. Coons' testimony because this Court previously allowed his testimony in another case.⁸⁸ The court thus failed to perform its vital gate keeping role under Rule 702 of the Texas Rules of Evidence.

Fundamental to Rule 702, *Kelly*, and *Daubert* is recognition that cross-examination is not always sufficient to cure unreliable "expert testimony."⁸⁹ This is particularly the case when such unreliable testimony is offered by a physician (under the mantle of prestige and scientific integrity with which these professionals are viewed by the public). A capital jury labors under the belief that physicians base their opinions on scientific data and cannot be reasonably disabused of this notion by cross-examination.

Although the Texas Psychological Association ("TPA") and Texas Appleseed ("Appleseed") endorse the full examination of all relevant mental health information that relates to the critical issues of life and death in a capital sentencing hearing, it is essential that the proffered expert testimony be based on legitimate and verified scientific evidence. Capital sentencing hearings demand the utmost accuracy and reliability, and provide a particularly appropriate context for the application of the *Kelly* standards.⁹⁰ The application of the *Kelly* requirements also would appear necessary to satisfy the

⁸⁸ R. XXXV: 127 (citing *LaGrone v. State*, 942 S.W.2d 602 (Tex. Crim. App. 1997)).

⁸⁹ See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993) ("These conventional devices [vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof], rather than wholesale exclusion under an uncompromising 'general acceptance' test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702.") (emphasis added); see also *Kelly*, 824 S.W.2d at 572 ("Unreliable . . . scientific evidence simply will not assist the [jury] to understand the evidence or accurately determine a fact in issue; such evidence obfuscates rather than leads to an intelligent evaluation of the facts.") (quoting K. Kreiling, *Scientific Evidence: Toward Providing the Law Trier With the Comprehensible and Reliable Evidence Necessary to Meet the Goals of the Rules of Evidence*, 32 Ariz. L. Rev. 915, 941-942 (1990)).

⁹⁰ See, e.g., *California v. Ramos*, 463 U.S. 992, 998-99 (1983) ("[T]he qualitative difference of death from all other punishments requires a correspondingly greater degree of scrutiny of the capital sentencing determination.").

Texas Rules of Evidence explicit evidentiary requirements, even as interpreted by this court in *Nenno*.

Adopting the *Kelly* factors to establish the reliability of expert testimony at a capital sentencing hearing is preferable to creating new standards out of whole cloth. First, applying the *Kelly* factors to ensure the reliability of expert testimony on future dangerousness is sensible because they were created for just such a purpose—to establish the reliability of expert testimony.⁹¹ Second, applying the *Kelly* factors to ensure the reliability of expert testimony on issues like future dangerousness is efficient because the *Kelly* factors are by now well-known and frequently applied. Indeed, the *Kelly* factors are intentionally “flexible” to enable courts to apply them in varied circumstances.⁹²

The Supreme Court’s decision in *Barefoot* does not foreclose examination of the evidentiary reliability of expert testimony regarding future dangerousness in death penalty cases. First, *Barefoot* decided only whether such expert testimony was unconstitutional, not whether it satisfied a particular evidentiary standard.⁹³ Second, *Barefoot* was decided before *Daubert* and *Kumho Tire*.⁹⁴ There is no logical reason why

⁹¹ *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993) (“[U]nder the Rules the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.”; *id.* at 597 (“[T]he Rules of Evidence—especially Rule 702—do assign to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.”); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999) (*Daubert* “pointed out that [scientific expert testimony] is admissible only if it is both relevant and reliable.”).

⁹² *United States v. Hicks*, 389 F.3d 514, 525 (5th Cir. 2004).

⁹³ *Barefoot v. Estelle*, 463 U.S.880, 899 n.6 (1983) (“The question before us is whether the Constitution forbids exposing the jury or judge in a state criminal trial to the opinions of psychiatrists about an issue that Justice Blackmun’s dissent concedes the factfinders themselves are constitutionally competent to decide.”; *id.* (distinguishing cases cited by the dissent because they were “decisions of federal evidence law” rather than “constitutional decisions”).

⁹⁴ Thomas Regnier, *Barefoot in Quicksand: The Future of “Future Dangerousness” Predictions in Death Penalty Sentencing in the World of Daubert and Kumho*, 37 AKRON L. REV. 469, 493 (2004). In fact, the author of *Daubert* (Justice Blackmun) was in the dissent in *Barefoot*. Further, even if one believed that *Daubert* only applied to novel scientific evidence, the Court’s opinion in *Kumho Tire* removed all doubt that the requirements of *Daubert* applies

the now-broadly accepted criteria established in *Daubert/Kelly* for the admissibility of expert testimony should not be applied in the context of a capital sentencing hearing. Finally, as set forth in this brief, there is a significant amount of new scholarship since *Barefoot* regarding the reliability of opinions of future dangerousness.

Barefoot's justification for the risk assessment function in capital cases was that mental health experts and courts are routinely involved in estimating the likelihood of future violence for commitment, sentence length, and parole eligibility.⁹⁵ Capital risk assessment differs from these other estimate contexts in two critical respects. First, in these non-capital contexts the risk of violence is in the community and is cured by the incapacitation of confinement. That confinement is considered adequate to reasonably prevent that future violence. In a capital context as it currently exists (i.e., 40-year minimum terms before parole eligibility or life-without-parole), the future risk is being asserted in the context of confinement. Unique to capital sentencing, as compared to other risk assessment functions, the State must essentially assert that it is incompetent to safely confine the defendant. Second, the consequence of error in risk assessment for civil commitment, sentence duration, and parole-eligibility is limited to loss of liberty; not loss of life. This is a profound distinction in the consequences of error, and the associated reliability standard that is applicable.

Also, *Barefoot* was decided *prior* to the availability of base rate data regarding the rates of prison violence among incarcerated murderers and capital offenders; or the

to all scientific evidence. Some scholars even argue that *Daubert*, sub silentio, overruled *Barefoot*. See, e.g., Paul C. Giannelli, *Daubert: Interpreting the Federal Rules of Evidence*, 15 CARDOZO L. REV. 1999, 2020-21 (1994).

⁹⁵ *Barefoot*, 463 U.S. at 897-98.

articulation of a scientific capital violence risk assessment relying on such base rate data. The absence of this data at the time of *Barefoot* is illustrated by the publication dates of the following articles. That base rate data now involves the following types of samples: (1) convicted murderers in the general prison population;⁹⁶ (2) inmates sentenced to life-without-parole;⁹⁷ (3) capital offenders sentenced to life terms, i.e., never sentenced to death;⁹⁸ (4) capital offenders initially sentenced to death at trial, but who subsequently gained relief by commutation, retrial, or other remedy;⁹⁹ (5) death-sentenced inmates on death row;¹⁰⁰ (6) death-sentenced offenders who are mainstreamed in the general prison population rather than being maintained on a segregated death row;¹⁰¹ (7) inmates in the general prison population of the Texas Department of Criminal Justice;¹⁰² and (8) inmates in administrative segregation in the Texas Department of Criminal Justice.¹⁰³

Finally, *Barefoot* was handed down prior to studies demonstrating that a conviction of murder was *not* predictive of serious violence in prison, nor are personality

⁹⁶ Jonathan R. Sorenson & Rocky L. Pilgrim, *An Actuarial Risk Assessment of Violence Posed by Capital Murder Defendants*, 90 J. CRIM. L. & CRIMINOLOGY 1251 (2000).

⁹⁷ Mark D. Cunningham, et al., *An Actuarial Model for Assessment of Prison Violence Risk Among Maximum Security Inmates*, 12 ASSESSMENT 40, 44-46 (2005).

⁹⁸ Mark D. Cunningham & Jonathan R. Sorensen, *Capital Offenders in Texas Prisons*, *supra*. See also James M. Marquart & Jonathan R. Sorensen, *A National Study of the Furman-Commuted Inmates: Assessing the Threat to Society from Capital Offenders*, 23 LOY. L.A. L. REV. 5 (1989); James W. Marquart et al., *Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?*, 23 LAW & SOC'Y REV. 451 (1989).

⁹⁹ James M. Marquart & Jonathan R. Sorensen, *A National Study of the Furman-Commuted Inmates: Assessing the Threat to Society from Capital Offenders*, 23 LOY. L.A. L. REV. 5 (1989); James W. Marquart et al., *Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?*, 23 LAW & SOC'Y REV. 451 (1989); Thomas J. Reidy et al., *From Death to Life: Prison Behavior of Former Death Row Inmates in Indiana*, 28 CRIM. JUST. & BEHAV. 62 (2001).

¹⁰⁰ John F. Edens, et al., *Predictions of Future Dangerousness in Capital Murder Trials: Is It Time To "Disinvent the Wheel?"*, 29 LAW & HUM. BEHAV. 55 (2005); Thomas J. Reidy, et al., *From Death to Life: Prison Behavior of Former Death Row Inmates in Indiana*, 28 CRIM. JUST. & BEHAV. 62, 66 (2001).

¹⁰¹ Mark D. Cunningham, et al., *An Actuarial Model for Assessment of Prison Violence Risk Among Maximum Security Inmates*, 12 ASSESSMENT 40, 44-46 (2005).

¹⁰² This information is detailed monthly in Emergency Action Center Reports produced by the Executive Services Department of the Texas Department of Criminal Justice.

¹⁰³ Annual data is available from the Executive Services Department of the Texas Department of Criminal Justice.

features such as Antisocial Personality Disorder or psychopathy. In fact, *Barefoot* was handed down in an era of far earlier parole eligibility (i.e., about 12 years when Mr. Marquart did his follow-up study), thus making contemplation of future community violence a reasonable consideration. Prison conditions in the Texas Department of Criminal Justice and wide availability of administrative segregation (super-maximum security) are also markedly different than existed in the earlier era.

As explained in this brief, there is a substantial amount of scientific analysis regarding the ability of mental health professionals to predict the likelihood that a specific individual will commit future acts of violence. That established science reveals several things. One, predictions of “future dangerousness” that are *not* based upon scientific methods—that is, without consideration of matters such as the “base rate” of violence (explained *supra*) and without consideration of matters of the presence or absence of specific “risk factors” that have been shown, in certain settings, to have a correlation (high or low) with future violence—are unreliable. Two, the application of the scientific methods to assess the likelihood of future violence has shown that there are extremely *low* “base rates” of violence in prison, so that it is highly unlikely that a scientifically reliable opinion can be offered that an individual is “more likely than not” to commit a serious act of violence while confined in prison. Three, to the extent that recent studies have attempted to identify those inmates who presented an *increased* risk of violence in prison, findings reveal certain counter-intuitive correlations between particular risk factors and the likelihood of violence. Notably, studies have shown that

the severity of the immediate offense and a past history of violence in the community are *not* reliable predictors of prison-based violence.

Given the clear status of base rate data regarding the low incidence of serious prison violence among capital offenders, a prediction by a mental health expert asserting a high likelihood that a capital defendant will commit serious violence in prison bears a particular burden to demonstrate the scientific basis for asserting a dramatic departure from the rate of such violence observed among this group of offenders. Dr. Coons neither referenced the fundamentally important base rate data nor provided any scientific basis for his conclusion that Mr. Espada would deviate from the group pattern.

Measured against these legal and scientific principles, Dr. Coons' methodology and opinion in this case lacked sufficient indicia of reliability to be offered to the jury as expert testimony. Dr. Coons did not base his opinion on scientific methods.¹⁰⁴ He did not consider applicable base rates of violence or utilize studies showing the correlation between particular risk factors and the likelihood of future violence. Indeed, Dr. Coons based his expert opinion almost exclusively on factors that have been shown *not* to have a strong correlation with the occurrence of serious acts of violence in prison. The admittedly subjective methodology employed by Dr. Coons in this case has not been tested, has not been subjected to peer review and publication, has an unknown rate of error, was not controlled by any standards, and is not generally accepted within the scientific community. Even more troubling is that, although Dr. Coons' expert opinion in

¹⁰⁴ If the State had any contrary support for Dr. Coons' testimony it is entirely absent from the record.

this case had no scientific validity, expert testimony like that offered by Dr. Coons is highly influential with jurors, even when the weaknesses in the methodology are exposed.

V. CONCLUSION

For the foregoing reasons, *Amici Curiae* Texas Psychological Association and Texas Appleseed respectfully urge the Court to base its decision on the need for reliability in expert testimony in this critical field, informed by the current state of scientific study concerning the ability to predict future behavior of individuals in the correctional setting.

Respectfully submitted,

GARDERE WYNNE SEWELL LLP

Michael Lowenberg
Texas Bar No. 12630000
Kevin Colbert
Texas Bar No. 04528550
Lloyd S. van Oostenrijk
Texas Bar No. 24056467
1601 Elm Street, Suite 3000
Dallas, Texas 75201-4761
(214) 999-3000

**ATTORNEYS FOR AMICI CURIAE
TEXAS PSYCHOLOGICAL
ASSOCIATION AND TEXAS APPLESEED**

CERTIFICATE OF SERVICE

I certify that I sent a true and correct copy of the foregoing brief, on this 10th day of April, 2007, upon the following counsel of record by placing the same into the United States Mail, first-class postage prepaid, addressed to:

Hilary Sheard
Senior Assistant Appellate Public Defender
Bexar County Appellate Public Defender's Office
Heritage Plaza
410 S. Main, Suite 214
San Antonio, Texas 78204

Counsel for Appellant

Michael Gross
106 South St. Mary's, Suite 260
San Antonio, Texas 78205

Habeas Counsel for Appellant

Kevin Patrick Yeary
Bexar County District Attorney's Office
Assistant Criminal District Attorney
Bexar County Justice Center
300 Dolorosa, Suite 4025
San Antonio, Texas 78205

Counsel for Appellee

Lloyd S. van Oostenrijk

TABLE OF CONTENTS

TABLE OF CONTENTS.....i

TABLE OF AUTHORITIES.....ii

IDENTITY OF PARTIES.....vi

IDENTITY OF AMICI CURIAE.....viii

ARGUMENT AND AUTHORITIES.....1

 I. Background.....1

 II. Dr. Coons’ Methodology and Expert Opinion in this Case
 Were Not Based Upon Science but Done “My Way;” However,
 His Testimony Likely Had a Substantial Influence on the Jury.....3

 A. A Significant Amount of Study Has Been Done
 Regarding the Reliability of Predictions of
 Future Dangerousness Which Shows That Predictions
 Not Based on Scientific Methods are Unreliable.....3

 B. The Application of Scientific Methods Has Yielded
 Important Information Regarding the Ability of Mental
 Health Professionals to Predict the Occurrence of Violence
 Within a Secure Prison Setting.....7

 C. Measured Against the Established Science Regarding
 Predictions of Future Violence, Dr. Coons’ Methodology
 and Opinion in This Case Lacked Sufficient Indicia of
 Reliability to Be Offered to the Jury as Expert Testimony.....11

 III. The *Nenno* Standard May Be An Inadequate Filter For
 Unreliable Scientific Testimony and More Searching Criteria
 Would Reveal the Unreliability of Dr. Coons’ Methodology.....14

 IV. The State Failed to Establish Dr. Coons’ Testimony Regarding
 Future Dangerousness Was Reliable By Clear and Convincing
 Proof as Required by *Kelly* and *Nenno*.....19

 V. Conclusion.....26

TABLE OF AUTHORITIES

CASES

<i>Allen v. State</i> , No. AP-74951, 2006 WL. 1751227 (Tex. Crim. App. 2006).....	16, 17
<i>Barefoot v. Estelle</i> , 463 U.S. 880 (1983) (No. 82-6080).....	21, 22
<i>California v. Ramos</i> , 463 U.S. 992 (1983).....	20
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993).....	20, 21
<i>E.I. du Pont de Nemours & Co. v. Robinson</i> , 923 S.W.2d 549 (Tex. 1995).....	15
<i>Hartman v. State</i> , 946 S.W.2d 60 (Tex. Crim. App. 1997).....	19
<i>Holiday v. State</i> , Nos. AP-74446 AP-74447, AP-74448, 2006 WL. 288661 (Tex. Crim. App. Feb. 8, 2006)	16
<i>Jordan v. State</i> , 928 S.W.2d 550 (Tex. Crim. App. 1996).....	20
<i>Jurek v. Texas</i> , 428 U.S. 262 (1976).....	15
<i>Kelly v. State</i> , 824 S.W.2d 568 (Tex. Crim. App. 1992).....	2, 19, 20
<i>Kumho Tire Co. v. Carmichael</i> , 526 U.S. 137, 141 (1999).....	21
<i>LaGrone v. State</i> , 942 S.W.2d 602 (Tex. Crim. App. 1997).....	20
<i>Mathews v. State</i> , 40 S.W.3d 179 (Tex. Crim. App. 2001).....	18

<i>Nenno v. State</i> , 970 S.W.2d 549 (Tex. Crim. App. 1998).....	2, 15, 18
<i>State v. Medrano</i> , 127 S.W.3d 781 (Tex. Crim. App. 2004).....	16, 19
<i>United States v. Hicks</i> , 389 F.3d 514 (5th Cir. 2004)	22
<i>United States v. Thomas</i> , CCB-03-0150, 2006 WL. 140558 (D. Md. Jan. 13, 2006)	18
<i>Weatherred v. State</i> , 15 S.W.3d 540 (Tex. Crim. App. 2000).....	19
<i>Woodson v. North Carolina</i> , 428 U.S. 280 (1976).....	14
<i>Zant v. Stephens</i> , 462 U.S. 862 (1983).....	14

STATUTES AND RULES

TEX. CODE CRIM. PROC. ANN. art. 37.071 § 2(b)(1)	5, 17
TEX. R. EVID. 702.....	15

SCIENTIFIC AND PROFESSIONAL PUBLICATIONS

Jack Alexander & James Austin, <i>Handbook for Evaluating Objective Prison Classifications</i> 25(Nat'l Inst. of Corrs. 1992).....	10
James Bonta et al., <i>The Prediction of Criminal and Violent Recidivism Among Mentally Disordered Offenders: A Meta-Analysis</i> , 123 Psych. Bull. 123 (1998).....	6, 7
Randy Borum et al., <i>Improving Clinical Judgment and Decision Making in Forensic Evaluation</i> , 21 J. Psychiatry & L. 35 (1993)	13
Randy Borum, <i>Improving the Clinical Practice of Violence Risk Assessment: Technology, Guidelines, and Training</i> , 51 Am. Psychologist 945 (1996)	5, 9
Mark D. Cunningham & Alan M. Goldstein, <i>Sentencing Determination in Death Penalty Cases</i> , in 11 <i>Handbook of Psychology: Forensic Psychology</i> 407.....	8, 10, 11

Mark D. Cunningham, et al., <i>An Actuarial Model for Assessment of Prison Violence Risk Among Maximum Security Inmates</i> , 12 <i>Assessment</i> 40 (2005).....	9, 10, 11
Mark D. Cunningham & Thomas J. Reidy, <i>Don't Confuse Me With the Facts: Common Errors in Violence Risk Assessment at Capital Sentencing</i> , 26 <i>Crim. Just. & Behav.</i> 20 (1999).....	7
Mark D. Cunningham & Jonathan R. Sorensen, <i>Capital Offenders in Texas Prisons: Rates Correlates, and An Actuarial Analysis of Violent Misconduct</i> , 31 <i>Law & Hum. Behav.</i> ____ (forthcoming 2007).....	4, 23
Mairead Dolan & Michael Dolan, <i>Violence Risk Prediction: Clinical and Actuarial Measures and the Role of the Psychopathy Checklist</i> , 177 <i>Brit. J. Psychiatry</i> 303 (2000).....	6
John F. Edens, et al., <i>Predictions of Future Dangerousness in Capital Murder Trials: Is It Time to "Disinvent the Wheel?"</i> , 29 <i>Law & Hum. Behav.</i> 55, 69 (2005)	6, 23
Paul Gendreau et al., <i>A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works!</i> , 34 <i>Criminology</i> 575 (1996)	6
Paul C. Giannelli, <i>Daubert: Interpreting the Federal Rules of Evidence</i> , 15 <i>Cardozo L. Rev.</i> 1999 (1994)	22
R. Karl Hanson, <i>What Do We Know About Sex Offender Risk Assessment?</i> , 4 <i>Psychol., Pub. Pol'y, & L.</i> 50 (1998)	7
K. Kreiling, <i>Scientific Evidence: Toward Providing the Law Trier With the Comprehensible and Reliable Evidence Necessary to Meet the Goals of the Rules of Evidence</i> , 32 <i>Ariz. L. Rev.</i> 915 (1990).....	20
Thomas R. Litwack & Louis B. Schlesinger, <i>Assessing and Predicting Violence: Research, Law, and Applications</i> , in <i>Handbook of Forensic Psychology</i> 205 (Irvin B. Weiner & Allen K. Hess eds., 1987).....	7
James M. Marquart & Jonathan R. Sorensen, <i>A National Study of the Furman-Commuted Inmates: Assessing the Threat to Society from Capital Offenders</i> , 23 <i>Loy. L.A.L. Rev.</i> 5 (1989)	11, 23
James W. Marquart et al., <i>Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?</i> , 23 <i>Law & Soc'y Rev.</i> 451 (1989)	11, 23
Gary B. Melton, et al., <i>Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers</i> 280 (2d ed. 1997).....	3, 12

John Monahan, U.S. Dep't of Health & Human Serv., <i>The Clinical Prediction of Violent Behavior</i> 47 (1981)	3, 5, 6, 9, 12
John Monahan, <i>Violence Risk Assessment</i> , in 11 <i>Handbook of Psychology: Forensic Psychology</i> 527 (Alan M. Goldstein ed., 2003).....	6
Douglas Mossman, <i>Assessing Predictions of Violence: Being Accurate About Accuracy</i> , 62 <i>J. Consulting & Clinical Psychol.</i> 783 (1994)	7
Nat'l Inst. Of Corrections, U.S. Dep't of Justice, <i>Jail Classification System Development: A Review of the Literature</i> 28 (rev. ed. 1992).....	10
Randy K. Otto, <i>Prediction of Dangerous Behavior: A Review and Analysis of "Second Generation" Research</i> , 5 <i>Forensic Repts.</i> 103 (1992)	5, 7
Thomas Regnier, <i>Barefoot in Quicksand: The Future of "Future Dangerousness" Predictions in Death Penalty Sentencing in the World of Daubert and Kumho</i> , 37 <i>Akron L. Rev.</i> 469 (2004).....	21
Thomas J. Reidy et al., <i>From Death to Life: Prison Behavior of Former Death Row Inmates in Indiana</i> , 28 <i>Crim. Just. & Behav.</i> 62 (2001).....	10, 11, 23
Daniel W. Shuman & Bruce D.Sales, <i>The Admissibility of Expert Testimony Based Upon Clinical Judgment and Scientific Research</i> , 4 <i>Psych., Pub. Pol'y, & L.</i> 1226 (1998).....	13
Christopher Slobogin, <i>Dangerousness and Expertise</i> , 133 <i>U. Pa. L. Rev.</i> 97 (1984)	3, 12
Jonathan R. Sorensen & Rocky L. Pilgrim, <i>An Actuarial Risk Assessment of Violence Posed by Capital Murder Defendants</i> , 90 <i>J. Crim. L. & Criminology</i> 1251 (2000) 9, 10, 23	

IDENTITY OF PARTIES

Pursuant to TEX. R. APP. P. 38.1(a), a complete list of all counsel and parties to the trial court's order is provided below so that the members of this Court may at once determine whether they are disqualified to serve or should recuse themselves from participating in the decision of this case.

Counsel for the State:

Kevin Patrick Yeary – Counsel on appeal
Kevin O'Connell – Counsel at trial
Wendi Wilson – Counsel at trial
Assistant Criminal District Attorneys
Bexar County Justice Center
300 Dolorosa, Suite 4025
San Antonio, Texas 78205

Appellant:

Noah Espada

Counsel for Appellant:

Hilary Sheard – Counsel on appeal
Angela J. Moore – Counsel on appeal
Appellate Public Defender's Office
Heritage Plaza
410 South Main, Suite 214
San Antonio, TX 78204

Richard E. Langlois – Counsel at Trial
217 Arden Grove
San Antonio, Texas 78215

Jeffrey J. Scott – Counsel at Trial
1004 South Saint Mary's Street
San Antonio, Texas 78205

Michael Gross – Habeas Counsel
106 South Saint Mary's Street
San Antonio, Texas 78205

Amicus Counsel:

Michael Lowenberg
Kevin Colbert
Lloyd van Oostenrijk
Gardere Wynne Sewell LLP
1000 Louisiana, Suite 3400
Houston, Texas 77002-5011

Trial Judge:

Honorable Bert Richardson – Presiding Judge

IDENTITY OF AMICI CURIAE

In compliance with TEX. R. APP. P. 11, Texas Appleseed states the following: Texas Appleseed, a non-profit public interest law organization that focuses on systemic reform of broad-based social issues, has been a leader in advocating for equal justice for persons with a mental illness charged with a criminal offense. As part of that advocacy, Texas Appleseed has developed widely-used resources for judges to assist them with issues that arise in cases involving defendants who have a mental illness, as well as handbooks for Texas attorneys who represent persons with mental illness in the criminal justice system. Texas Appleseed works to set up systems that deliver quality appointed counsel to indigent defendants with mental health disorders, and provides training and technical assistance to counties as they create new programs aimed at decriminalizing the symptoms of mental illness by diverting non-violent offenders away from the criminal justice system and into community-based treatment. Much of Texas Appleseed's advocacy focuses on dispelling myths and stereotypes associated with mental illness, and discussing the wide body of research on the nexus between mental health problems and the criminal justice system. Texas Appleseed recognizes that requiring compliance with long-recognized standards for scientific reliability in the testimony of expert mental health witnesses is imperative to assuring equal justice.

In compliance with TEX. R. APP. P. 11, the Texas Psychological Association states the following: The Texas Psychological Association (TPA) was established for the purpose of advancing psychology as a scientific profession and as a means of promoting mental health and human welfare by the encouragement of psychology in all of its branches. With its membership of over 1600 Texas psychologists, TPA strives to promote scientific research accomplished through rigorous research methodology; to improve the qualifications and usefulness of

psychologists through high standards of professional ethics, conduct, education, training, and achievement; and to increase the diffusion of psychological knowledge to institutions and the public. The association thereby works to advance scientific interest and inquiry, and to foster the application of psychological science in the promotion of the public welfare. In pursuit of these objectives, TPA is very concerned that any issues that have been the subject of psychological research be accurately and fairly presented to public institutions, particularly in court proceedings affecting the application of the justice to the lives of citizens. The field of professional psychology as a discipline has been primarily responsible for the large body of scientific research now extant on the assessment of future risk for violent behavior. As such, TPA sees it as a professional duty to object to testimony from mental health professionals that is not only not grounded in science, but frankly flies in the face of available scientific data.

Gardere Wynne Sewell LLP represents both Texas Appleseed and the Texas Psychological Association, *pro bono*, for the purpose of filing this brief as an amicus curiae.