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Symposium Foreword

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SYMPOSIUM: *DAUBERT*, INNOCENCE, AND THE FUTURE OF FORENSIC SCIENCE

SYMPOSIUM FOREWORD

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The years since *Daubert* have not been kind to those seeking to challenge prosecutorial expert evidence,[1] as many of the Symposium authors recognize. After two decades of trying to convince courts that there is no empirical basis for handwriting identification testimony declaring a match between two samples, Michael Risinger claims to be packing his bags and leaving the island until there is a more conducive climate for examining the reliability problems.[2] Michael Saks, reviewing a number of cases in which courts have found ways to avoid applying reliability standards to forensic science, concludes wearily that "whatever the reason, in criminal cases, most judges respond to government proffers of non-science forensic science, no matter how weak it is, regardless of the circumstances, by admitting the testimony."[3] Erica Beecher-Monas, discussing defendants' proposed genetic testimony in criminal trials, notes that the evidence is often excluded on policy grounds or for a lack of helpfulness.[4] Brian Foley begins with the recognition that while "junk science" is often used against defendants, defendants rarely raise and even more infrequently win *Daubert* challenges against the prosecution's evidence.[5] Craig Cooley and Gabriel Oberfield from the Innocence Project remark that the failure of judges to exclude faulty forensic science is only "a single star in a constellation of legal *and* forensic science shortcomings."[6] From a

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1. *See e.g.* Jane Campbell Moriarty, *Misconvictions, Science, and the Ministers of Justice*, 86 Neb. L. Rev. 1 (2007) (discussing the unwillingness of courts to exclude faulty forensic science when challenged by defendants).

2. D. Michael Risinger, *Goodbye to All That, or A Fool's Errand, by One of the Fools: How I Stopped Worrying about Court Responses to Handwriting Identification (and Forensic Science in General) and Learned to Love Misinterpretations of* Kumho Tire v. Carmichael, 43 Tulsa L. Rev. 447, 471 (2007).

3. Michael J. Saks, *Protecting Factfinders from Being Overly Misled, While Still Admitting Weakly Supported Forensic Science into Evidence*, 43 Tulsa L. Rev. 609, 622 (2007).

4. Erica Beecher-Monas, *Circumventing* Daubert *in the Gene Pool*, 43 Tulsa L. Rev. 241, 241 (2007).

5. Brian J. Foley, *Until We Fix the Labs and Fund Criminal Defendants: Fighting Bad Science with Storytelling*, 43 Tulsa L. Rev. 397, 397 (2007).

6. Craig M. Cooley & Gabriel Oberfield, *Fixing Forensic Science and Increasing the Reliability of Forensic Evidence: Applying* Daubert *Isn't the Only Problem*, 43 Tulsa L. Rev. 285, 285 (2007).

comparative perspective Déirdre Dwyer observes "the expert evidence of prosecutors is subject to less scrutiny that that of criminal defendants . . . ."[7] And Susan Rozelle throws up her hands and asks, "*Daubert*, schmaubert," do criminal defendants get the short end of the science stick?[8] Should we abandon hope, all who have entered the arena of forensic science challenges?

Despite a strong connection between faulty forensic science and wrongful conviction,[9] courts continue to turn a blind eye to the failures of forensic science. Although many of the authors herein express grave concerns that courts have been unwilling to take seriously the challenges to forensic evidence, they have not—despite Professor Risinger's tongue-in-cheek claim—simply given up. Rather, each author creates new approaches to ensuring a more fair and accurate trial with respect to the use of forensic scientific evidence.

While recognizing problems and concerns with forensic science, this Symposium is about the future of forensic science, not the past. So it is with some relief that Michael Risinger has unpacked his bags and Michael Saks has found a way to soften courts' refusal to exclude evidence. Indeed, the Symposium authors offer creative and thoughtful ways to manage forensic science evidence to account for its shortcomings without losing sight of its potential for use.

In their article, Innocence Project Staff Attorney Craig Cooley and Research Analyst Gabriel Oberfield chronicle numerous cases in which faulty and fraudulent forensic science played a major role in erroneously convicting innocent people. As a result of these problems, some appellate courts have overturned convictions or death sentences. To improve the quality of justice, the authors propose a number of suggestions for overhauling the forensic science community. These suggestions include the creation of forensic oversight entities to accredit, license, and certify labs and the use of so-called "Coverdale grants" to investigate claims of forensic science negligence and misconduct.

Michael Risinger's article and massive appendix chronicle nearly 70 cases involving the reliability of handwriting identification expertise post-*Daubert*. He concludes that judges have failed to perform the task-specific analysis that *Daubert* and *Kumho Tire* require,[10] understanding that such an analysis would be labor-intensive for courts and would likely not provide an overarching statement of reliability that could be applied to the next case in the pipeline. And while he is resigned to the fact that the sheer daunting weight of opinions refusing to honestly address the shortcomings in handwriting identification has foreclosed the potential for further potentially successful challenges, he sees some reason to be hopeful: Namely, the long-awaited National

7. Déirdre Dwyer, *(Why) Are Civil and Criminal Expert Evidence Different?* 43 Tulsa L. Rev. 381, 383 (2007).

8. Susan D. Rozelle, Daubert, *Schmaubert: Do Criminal Defendants Get the Short End of the Science Stick?* 43 Tulsa L. Rev. 597 (2007).

9. *See e.g.* Brandon L. Garrett, *Judging Innocence*, 108 Colum. L. Rev. 55, 81 (2008) (discussing how of the 200 exonerated defendants, 113 included erroneous forensic evidence; the second leading cause of wrongful conviction).

10. For a fuller explication, see D. Michael Risinger, *Defining the "Task at Hand": Non-Science Forensic Science after Kumho Tire v. Carmichael*, 67 Wash. & Lee L. Rev. 767 (2000).

Academy of Sciences/National Research Council Committee on the Needs of Forensic Science Report, which he hopes may urge greater scientific accountability in the area of forensic science.

Dr. Robert Allen and Dr. Jarrad Wagner begin their article with a recognition that the increased focus in the legal system on forensic science has lead to a number of suggested changes, including certification of analysts, accreditation of laboratories, and continuing education for those involved in the field.[11] Drs. Allen and Wagner discuss the serious problem of labs "drowning in casework" due to inadequate infrastructure, notably in the area of sufficient properly trained workers to handle the volume of cases.[12] As an example of a graduate program that provides appropriately trained individuals, the authors describe the program at Oklahoma State University. This program, which produces Masters-level graduates, is a combination of science and scientific evidence, with the latter courses being taught by law faculty. The program, in existence for seven years, was recently granted full accreditation from the American Academy of Forensic Sciences.

Mara Merlino and co-authors provide a social-science analysis of both latent print examination and forensic document examination cases, discussing how the government's testifying experts have responded to the courtroom challenges on the grounds of education, training, skill, and expertise.[13] In contraposition to the opinions of other authors in the Symposium, Dr. Merlino's group finds that while these areas of forensic science are "not infallible," the field rests on well-founded principles and the experts have demonstrable expertise in the field.[14] However, they do agree with other Symposium commentators that the field is changing to become more scientifically-grounded and that *Daubert* has provided an impetus for change within the field. Moreover, Dr. Merlino and co-authors urge forensic scientists to take seriously the need for more standardized training, proficiency testing, and valid and reliable measures of error rate.

By contrast, Dr. Simon Cole's article, complementing much of his other scholarship, critiques the principles and methods of latent print examiners, arguing that latent print examinations fail to comply with the reliability requirements that *Daubert* mandates.[15] In this article, however, Dr. Cole borrows the "evidence-based medicine" concept as a tool to evaluate latent print examinations. Premising his inquiry on *Daubert*'s requirements and terming his evaluation "evidence-based evidence," he concludes that "[i]t is indeed shocking that the government appears unable to muster any evidence of reliability . . . ."[16] His analysis considers both a number of cases and addresses various arguments the government puts forth to support its claims of

11. Robert W. Allen & Jarrad R. Wagner, *Graduate Education in Forensic Science*, 43 Tulsa L. Rev. 235, 235 (2007).

12. *Id.* at 237.

13. Mara L. Merlino et al., *Meeting the Challenges of the* Daubert *Trilogy: Refining and Redefining the Reliability of Forensic Evidence*, 43 Tulsa L. Rev. 417 (2007).

14. *Id.* at 431.

15. Simon A. Cole, *Toward Evidence-Based Evidence: Supporting Forensic Knowledge Claims in the Post-*Daubert *Era*, 43 Tulsa L. Rev. 263 (2007).

16. *Id.* at 282.

reliability.

Using a novel approach, Professor Brian Foley suggests that it is time to consider more indirect attacks on faulty scientific evidence, arguing that we reform the evidence rules to allow criminal defendants an easier route to telling a compelling story of innocence. While recognizing that lawyers should continue to make direct attacks on the reliability and validity of scientific evidence, they should include indirect attacks "with a *story of innocence* that may cause the jury to disregard the scientific evidence."[17] In making this argument, Professor Foley urges three reforms. First, greater funding for expert witnesses should be allowed when there is a plausible claim of innocence, since the claim suggests that the forensic science may indeed be faulty. Second, the Federal Rules of Evidence should be amended to make it easier for defendants to prove their own good character with specific acts evidence. Additionally, Rule 609 should be abolished, since it unfairly prevents defendants from testifying due to the fear of impeachment with prior convictions.

Dr. Déirdre Dwyer is a British Academy Post-Doctoral Fellow at the University of Oxford who writes about both the English and U.S. systems regulating expert witnesses. Her thesis is that in the fifteen years since *Daubert* was decided by the U.S. Supreme Court, civil evidence is scrutinized more closely than criminal evidence. Additionally, Dr. Dwyer notes that civil plaintiffs' experts are more searchingly examined than civil defendants but that criminal defendants' expert evidence is examined more closely than prosecution's expert evidence. This structure in criminal cases, however, is counterintuitive to what we might expect, since one would expect that evidence rules are enforced more strictly against prosecutors, given the liberty interests at stake in criminal cases. Moreover, she posits, the "general quality of the theories, methodologies, and quality assurance systems appear to be lower than in the civil justice systems."[18] Dr. Dwyer calls for greater controls, external validation, and organizational independence of laboratories in criminal expert evidence, as well as changes to norms of conduct relating to expert witnesses in civil litigation.

Professor Erica Beecher-Monas's article focuses on a different area of forensic science than the other participants: The attempted use of genetic evidence by defendants in criminal trials. She notes that the "criminal courts . . . lack . . . a coherent theoretical basis for admitting or excluding expert genetic testimony."[19] While noting that many courts, including the U.S. Supreme Court, find genetic testimony unpersuasive,[20] many courts are also confused and skeptical about inferences that can properly be drawn from such testimony. Additionally, even when such testimony is more readily admitted, such as in the penalty phase of capital cases, the testimony is ineffective. Against this background, Professor Beecher-Monas urges courts to evaluate specific types of genetic testimony, focusing on the validity of the proposed evidence. If the proponent can offer a firm scientific basis, she argues that courts should allow such evidence to be used as mitigation for the jury to evaluate.

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17. Foley, *supra* n. 5, at 400.
18. Dwyer, *supra* n. 7, at 395.
19. Beecher-Monas, *supra* n. 4, at 246.
20. See e.g. *Schriro v. Landrigan*, 127 S. Ct. 1933, 1943–44 (2007).

In her article on forensic science, Professor Rozelle posits as a "testable hypothetical" that criminal defendants have received the short end of the stick when it comes to expert evidence.[21] Focusing on "anecdata" from cases, she discusses fingerprints, toolmarks, eyewitness identification, and future dangerousness, all of which support her hypothesis. Concluding that her hypothesis is correct, she finds expert testimony decisions in criminal cases are unrelated to any articulate test of admissibility. Rather, the decisions result from "inertia, politics, and an unintended consequence of the defense-friendly burden of proof, combined with a healthy dose of the kind of human fallibility that results from asking judges to play scientist."[22]

Michael Saks, in another of his series of articles about the substantial shortcomings of forensic science, details some of the problems with handwriting, fingerprint comparison, and forensic odontology. Nonetheless, he notes, the *Daubert*-annointed gatekeepers—trial judges—have simply let in all the evidence. "[C]ourts have found a multitude of ways to avoid the outcomes *Daubert* would have led to, had it been applied conscientiously to the reality of the non-science forensic sciences."[23] Despite this result, Professor Saks details some approaches judges might use, short of exclusion, to properly cabin the evidence. Among these approaches are: permitting testimony about observations but disallowing conclusions about a match; requiring examiners to use blind testing; requiring experts and labs to be certified; limiting the reach of expert's testimony to subjects that are known and supportable; prohibiting exaggerated testimony; providing additional jury instructions; and making more frequent use of court-appointed experts and panels of experts.

In all, the authors recognize the shortcomings of forensic science and offer important suggestions for improving the quality of admitted evidence and thereby improving the quality of justice.

21. Rozelle, *supra* n. 8, at 597.
22. *Id.* at 606–07.
23. Saks, *supra* n. 3, at 620.