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Lawyers Judging Experts: Oversimplifying Science and Undervaluing Advocacy to Construct an Ethical Duty?

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Abstract

My focus is on an apparent trend at the intersection of the fields of evidentiary standards for expert admissibility and professional responsibility, namely the eagerness to place more ethical responsibilities on lawyers to vet their proffered expertise to ensure its reliability. My reservations about this trend are not only based on its troubling implications for the lawyer's duty as a zealous advocate, which already has obvious limitations (because of lawyers' conflicting duties to the court), but are also based on the problematic aspects of many reliability determinations. To expect attorneys—and this is what the proponents of a duty to vet experts expect—to do sufficient scientific research to create their own reliability controversy, make a determination as to the ultimate reliability of their own experts, and face ethical sanctions if they err is going too far. While it is easy to choose examples that support a compelling argument for a responsibility to vet experts, the complexity of the scientific enterprise, in terms of its diverse methodologies, probabilistic conclusions, and genuine scientific disagreements, counsels against a broad, new ethical duty. Indeed, some of the arguments for that new duty seem to rest on unrealistic assumptions about science and the ease with which reliability determinations can be made. Moreover, a broad duty to vet experts would represent a serious and problematic departure from the lawyer's role as an advocate.

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I. INTRODUCTION

> *The participants in the [New Jersey] procedure [for compulsory medication] are mental health professionals, rather than judges who have doffed their black robes and donned white coats.*
>
> Rennie v. Klein[1]

* Professor and Arthur M. Goldberg Family Chair in Law, Villanova University School of Law. The author is grateful for the criticisms and suggestions offered, in response to an earlier draft of this article, by Professors Michael Saks, Joseph Sanders, Michael Risinger, Gary Edmond, Edward Cheng, and Andrew Jurs; all errors, of course, remain the responsibility of the author.

1. Rennie v. Klein, 653 F.2d 836, 851 (3d Cir. 1981), *vacated*, 458 U.S. 1119 (1982).

Judge Alex Kozinski . . . interpreted Daubert as creating a brave new world in which trial court judges donned white coats and were forced to play scientist.

David L. Faigman & John Monahan [2]

In the ongoing discourse concerning admissibility of scientific expertise in the courtroom, the question of whether post-*Daubert* trial judges should become "amateur" scientists[3] (no one is suggesting an abdication of the judicial role[4]) is meant to raise concerns about the capacity of judges to make scientific judgments. My focus is on another apparent trend at the intersection of the fields of evidentiary standards for expert admissibility and professional responsibility, namely the eagerness to place more ethical responsibilities on lawyers to vet their proffered expertise to ensure its reliability. In terms of the extant clothing metaphors, lawyers are now seemingly asked to don *both* black robes *and* white lab coats.[5]

My reservations about this trend are not only based on its troubling implications for the lawyer's duty as a zealous advocate, which already has obvious limitations (because of lawyers' conflicting duties to the court), but are also based on the problematic aspects of many reliability determinations.[6] I take seriously Judge Kozinski's concern, in *Daubert* on remand, that "scientists often have vigorous and sincere disagreements as to what research methodology is proper, what should be accepted as sufficient proof for the existence of a 'fact,' and whether information derived by a particular method can tell us anything useful about the subject under study."[7]

The fact that judges, typically untrained in science, need to "resolve disputes among respected, well-credentialed scientists about matters squarely within their expertise,"[8] a "daunting task,"[9] seems to suggest that lawyers could too. But judges do not always agree on the admissibility of

2. David L. Faigman & John Monahan, *Psychological Evidence at the Dawn of the Law's Scientific Age*, 56 ANN. REV. PSYCH. 631, 636 (2005).

3. *See* Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 601 (1993) (Rehnquist, J., dissenting) (noting that Federal Rule of Evidence 702 does not impose on judges "either the obligation or the authority to become amateur scientists").

4. Indeed, it was *Frye*-regime judges who might have been thought to abdicate judicial decision making to technical experts, but *not* post-*Daubert*, gatekeeping judges. *See* Faigman & Monahan, *supra* note 2, at 636 (suggesting that the *Frye* test, namely "whether the field accepted the proffered knowledge," was more deferential to scientists than the *Daubert* test, whereby "judges have brought greater scrutiny to bear on proffered expertise").

5. *See infra* notes 12–20 and accompanying text.

6. *See infra* text accompanying note 7.

7. Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311, 1316 (9th Cir. 1995).

8. *Id.*

9. *Id.* at 1315.

expertise, and discerning reliability has proved to be controversial.[10] To expect attorneys—and this is what the proponents of a duty to vet experts expect—to do sufficient scientific research to create their own reliability controversy, make a determination as to the ultimate reliability of their own experts, and face ethical sanctions if they err is going too far. While it is easy to choose examples that support a compelling argument for a responsibility to vet experts, the complexity of the scientific enterprise, in terms of its diverse methodologies, probabilistic conclusions, and genuine scientific disagreements, counsels against a broad, new ethical duty. Indeed, some of the arguments for that new duty seem to rest on unrealistic assumptions about science and the ease with which reliability determinations can be made. Moreover, a broad duty to vet experts would represent a serious and problematic departure from the lawyer's role as an advocate.

At the outset, however, I should acknowledge that the notion of imposing a duty to vet experts has tremendous appeal and seems to rest on the convergence of three other trends or phenomena.[11] First, concerns over prosecutorial misuse of expert testimony are growing and easily justified:

> Some of the most disturbing revelations that emerged from the DNA exonerations . . . in the 1990s concern the misconduct of prosecutors. In *Actual Innocence*, [which examined] sixty-two . . . DNA exonerations secured through Cardozo Law School's Innocence Project[, a] . . . significant contributor to these miscarriages of justice was the misuse of expert testimony. A *third* of these cases involved "tainted or fraudulent science" . . . .
>
> The prosecutorial misconduct revealed in the exoneration cases, however, is not a new phenomenon . . . [which suggests] that the

10. *See* DAVID S. CAUDILL & LEWIS H. LARUE, NO MAGIC WAND: THE IDEALIZATION OF SCIENCE IN LAW 15–47 (2006) (offering examples of trial judges whose reliability determinations were reversed on appeal); Susan Haack, *Irreconcilable Differences? The Troubled Marriage of Science and Law*, 72 LAW & CONTEMP. PROBS. 1, 6–7 (2009).

> The *Daubert* ruling is far from unambiguous . . . and its articulation of the idea of evidentiary reliability is far from transparent . . . . The *Joiner* ruling . . . creates further concerns about the blurring of questions of admissibility with questions of the weight or the sufficiency of evidence; the *Kumho Tire* ruling finally acknowledges that what really matters is . . . whether [expert testimony, scientific or otherwise,] is reliable—yet it seems to leave the tricky stuff to courts' discretion. And the revised [Federal] Rule [of Evidence] 702, with its emphatic repetition of "reliable," "reliably," and "sufficient," is apt to leave one doubtful whether *any* verbal formula, by itself, could make it possible to determine whether the data on which a scientific witness bases his opinion are sufficient, or whether his methods are reliable.

Id.

11. *See infra* notes 12–20 and accompanying text.

problem is systemic rather than episodic.[12]

Giannelli and McMunigal provide ample support for, and frightening examples of, that proposition.[13] They conclude that a gatekeeping role for prosecutors should be added to ABA Model Rule 3.8, requiring, as a precondition to offering scientific evidence, a "good faith and reasonable belief that the evidence (1) is based on sufficient facts or data, (2) is the product of reliable principles and methods, and (3) is the product of reliable application of such principles and methods to the facts of the case."[14] That is, the prosecutor should perform, in advance, the admissibility determination typically performed by a trial judge in a *Daubert* hearing.

Second, and closely related to the concerns over prosecutors' use of unreliable forensic science, there is a growing concern that the "existing rules of admissibility, judicial discretions, jury directions, limitations placed on the use of evidence, and the availability of review have not been used in ways that might have prevented serious and continuing problems."[15] In his appeal to Canadian courts to develop a strong *Daubert*-type standard, the problems that Gary Edmond had in mind are related to prosecutors' use of evidence based in forensic science and medicine, fields "historically insulated from more mainstream scientific and biomedical research;" this suggests the need for "an explicit reliability standard [to be imposed] on expert evidence adduced by the state."[16]

> The basic contention is that courts should not admit expert evidence adduced by the prosecution unless there are good grounds for believing that the evidence is reliable. Expressed more precisely, judges should [require] that evidence is *demonstrably reliable* . . . . In practice, the state would be expected to undertake some kind of empirical testing to ascertain whether the techniques and theories relied on by forensic scientists, pathologists, and technicians are valid and accurate.[17]

Because courts throughout the common-law jurisdictions do not seem to

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12. Paul C. Giannelli & Kevin McMunigal, *Prosecutors, Ethics, and Expert Witnesses*, 76 FORDHAM L. REV. 1493, 1493–94 (2007) (citing BARRY SCHECK ET AL., ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED 246 (2000)).

13. *See* Giannelli & McMunigal, *supra* note 12, at 1495–1513.

14. *Id.* at 1535–36 (referring to MODEL RULES OF PROF'L CONDUCT R. 3.8 (2007)). The proposed addition to Model Rule 3.8 tracks the prerequisites for admissibility in Federal Rule of Evidence 702. *Id.*

15. *See* Gary Edmond, *Pathological Science? Demonstrable Reliability and Expert Forensic Pathology Evidence*, at 17, *available at* http://www.attorneygeneral.jus.gov.on.ca/inquiries/goudge/policy_research/pdf/Edmond_Paper.pdf (*published in* PEDIATRIC FORENSIC PATHOLOGY AND THE JUSTICE SYSTEM 96–149 (K. Roach ed., 2008)); *see also* Giannelli & McMunigal, *supra* note 12, at 1531–32.

16. *See* Edmond, *supra* note 15, at 1, 3.

17. *Id*. at 1–2.

"have subjected institutionalized forensic science and medicine to particularly stringent tests of accountability," and even though the U.S. federal courts' "*Daubert* criteria provide neither an accurate (or even coherent) characterization of science, medicine, and expertise, nor an especially neat solution to issues of reliability" for "impecunious [criminal] defendants (or plaintiffs)," an onerous application of "all four of the *Daubert* criteria" would "seem to be a reasonable requisite for [prosecutorial use of] forensic science and medical evidence."[18] Although Edmond does not recommend a higher *ethical* standard for Canadian prosecutors (or other attorneys), his proposal for reform places additional responsibilities on prosecutors to test the types of expertise they typically use.[19]

The third phenomenon contributing to the appeal of imposing a duty to vet experts, due in part to revelations of junk forensic science, is the tendency to idealize science and the "scientific method" as relatively uncomplicated sources of knowledge that could and should be used to stabilize the interpretive, rhetorical, social, and institutional instabilities of legal contexts. However, such an idealization downplays or eclipses the interpretive, rhetorical, social, and institutional aspects of science itself.[20] As I will explain below, some of the proposals to require that lawyers vet experts seem to assume that assessing the reliability of an expert is simply a matter of checking one's expert's testimony against the presumably stable knowledge-base of the scientific establishment. Or, in the case of certain types of forensic "science," assessment is simply a matter of recognizing that there is no research validating their reliability.

In the face of the convergence of these trends—prosecutorial misconduct, seemingly weak judicial control, and a romanticized vision of science for law—some obvious objections arise to my argument that an ethical duty to vet expertise is problematic because of both the complexity of reliability determinations *and* the role of an advocate.

First, because a prosecutor's role as a minister of justice is distinct from the roles of criminal defense counsel and civil advocates, an ethical rule for prosecutors to vet expertise would not affect the goals of advocacy.[21] Thus,

18. *Id.* at 14, 36, 38. That is, Edmond distinguishes between the prosecution and the defense (the "demonstrably reliable" requirement "should only apply . . . to evidence adduced by the prosecution") . . . and between the criminal and civil litigation contexts ("plaintiffs, like criminal defendants, are not always in a position to produce demonstrably reliable evidence"). *Id*. at 32–33.

19. *Id.* at 1–2.

20. *See generally* CAUDILL & LARUE, *supra* note 10 (arguing that judicial failure to acknowledge the pragmatic aspects of science results in bad admissibility determinations, i.e., sometimes keeping out good science and sometimes allowing bad science into court).

21. *See* David Luban, *The Conscience of a Prosecutor*, 45 VAL. U L. REV. (forthcoming 2010), *available at* http://scholarship.law.georgetown.edu/facpub/367/.put.

my only argument against such a rule is that reliability determinations can be complex due to the uncertainties of science. However, critics of the weaknesses of forensic science point out that some *types* of purported expertise are so easily discredited that a prosecutor should not introduce them (even if courts find them admissible).[22] I agree, but there are several options to deal with that problem:

(a) Because the current rule that allows attorneys to present evidence as long as it is not *known* to be false "reflects an adversarial paradigm," Giannelli and McMunigal (and others) propose an ethical rule that "would bar a prosecutor from offering scientific evidence unless she knows it is sound."[23]

(b) Encourage judges to develop "the formal expectation that the prosecution can only adduce expert evidence if it is shown to be reliable."[24] "If wrongful convictions across the common-law world have demonstrated anything, it is that liberal admissibility standards and judicial complacency have enabled prosecutors to use (and continue to rely upon) expert evidence that is not reliable."[25] *Daubert* was supposed to remedy such problems, but its "demanding standards . . . have yet to be fully implemented in criminal litigation."[26]

(c) Rely on the current ethical framework to police prosecutorial misuse of unreliable evidence—which does not seem to be working.

Given the persistent problems of prosecutorial use of forensic science, it would be naïve to suggest that the solution is the already-established *Daubert* regime or the current ethical rules, which makes the establishment of a new ethical rule for prosecutors seem unavoidable. Moreover, urgent concerns over fairness and justice in criminal law would seem to eclipse any theoretical concerns over the uncertainties of science that might make it difficult for prosecutors to know the soundness of their expertise.[27] On the

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> Prosecutors aren't supposed to win at all costs. In a time-honored formula, their job is to seek justice, not victory . . . . [T]his stark difference between the prosecutor's mission and the mission other advocates are assigned in the adversary system is obvious: the criminal justice system would be a travesty if a prosecutor, holding years of someone's life in her hands, cared about nothing but notching another victory.

Id. at 8–9.

22. *See* Giannelli & McMunigan, *supra* note 12, at 1493 n.1.

23. *See id.* at 1533, 1535; Myrna S. Raeder, *See No Evil: Wrongful Convictions and the Prosecutorial Ethics of Offering Testimony by Jailhouse Informants and Dishonest Experts*, 76 FORDHAM L. REV. 1413, 1439 (2007); Jane Campbell Moriarty, *"Misconvictions," Science, and the Ministers of Justice*, 86 NEB. L. REV. 1, 28–29 (2007).

24. *See* Edmond, *supra* note 15, at 30–31 (recommending that the Canadian Supreme Court explain "how indicia of reliability, like those from *Daubert* and elsewhere, should be weighted and applied").

25. *Id.*

26. Giannelli & McMunigal, *supra* note 12, at 1531.

27. Giannelli and McMunigal are mildly critical of Professor Moriarty's proposal that prosecutors not use evidence known (or which should be known) to be unreliable because "what is or is not reliable is subject to debate," and it "would be difficult to fault a prosecutor who used

other hand, some types of expertise *are* more difficult to evaluate, such that a general ethical rule requiring prosecutors only to offer evidence that they *know* is sound could be difficult to enforce. But the force of these objections—that prosecutors need policing, that much of the questionable forensic science is not that complicated, and that life and liberty are at stake—combine to make an exception (to my argument) for prosecutors reasonable, necessary, and well worth the risk that, in rare criminal cases (i.e., trials involving highly complicated expertise), the rule will be difficult to apply and enforce. In any event, my argument in this Article is against imposing a general duty on all attorneys to vet their expertise.

But there is another obvious objection to my argument, without regard for the need for an exception to address prosecutorial misuse of purportedly scientific evidence—namely, whether it really is an onerous burden on attorneys to confirm the reliability of their expertise. I should emphasize that my argument is not based on any presumed inability of attorneys to understand complex science or on any notion of scientific illiteracy. Rather, I want to emphasize the instabilities and uncertainties of expertise itself and base my argument on the phenomenon of serious disagreements among experts as to the reliability of certain scientific arguments. While it is obviously necessary for judges and juries to make difficult evaluations, I balk at the notion that such evaluations should always be made in advance of the trial by advocates. I say "always" because I recognize instances where attorneys should withhold frivolous evidence. My argument is simply that we should not construct a general rule based on such examples. Rather, we should hesitate to modify radically the advocate's role, primarily because of the many counter-examples where the reliability of the science is not so easily discernable.

In Section II below, I summarize the controversy over the ethical duties of a lawyer with respect to proffered expertise, including (i) the proposal requiring all attorneys to vet the reliability of their experts and (ii) the compelling argument for such a duty on the part of prosecutors in light of the crisis in criminal forensics. I argue, in Section III, that the proposal for a general duty is based on uncomplicated hypotheticals and an oversimplified view of science. In Section IV, I consider the implications of proposals to vet experts for the lawyer's role as advocate. I conclude, in Section V, that while numerous

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[weak] evidence carefully—that is, ensuring that the jury understood its limitations." *Id*. at 1535 n.246. Thus, they concede the controversy over "reliability" and impliedly the controversial nature of their own proposed rule. In response to commentators who argue that the "principles and methods of science are often uncertain and in a state of flux," they recognize the possibility that we may need a less demanding duty on prosecutors to only confirm that their expertise is based on facts and data, but not "the product of reliable principles and methods." *Id.* at 1536 n.248.

limitations on advocacy are justified, a broad duty to pre-judge the validity of proffered expertise is not.

II. DISCOURSES OF ADMISSIBILITY

> *[T]o some extent the very nature of science can be characterized as uncertain, because scientific theories are either underdeterminative, or are never fully consistent with all the available evidence. Though the nature and degree of uncertainties may vary depending upon the given situation, . . . much of scientific research can be characterized as "uncertain" . . . .*
>
> Stephanie Tai[28]

In the scholarly discourse concerning health and environmental regulation, scientific uncertainty is a major theme—debates persist about whether the evidence to support a regulation is too uncertain or about acceptable levels of uncertainty.[29] Inevitable uncertainties are, however, not so prominent in the scholarly discourse concerning scientific expertise in the courtroom. Perhaps because regulation is prospective, and because a question about whether a particular chemical is harmful does not require a yes or no answer—"doubt may preclude a decision"[30]—the regulatory arena is unlike retrospective litigation where a decision about, for example, whether a workplace chemical caused harm is required.[31] On the other hand, if a judge or jury does not find that such a tort plaintiff met his or her burden of proof, that decision is not necessarily a "no" answer—the chemical may have caused the harm, but the evidence was insufficient, or perhaps too uncertain, to support a verdict.[32] And yet, in the post-*Daubert* era, characterized by judicial gatekeeping and concerns over "junk science" in the courtroom, decisions are made regularly (in so-called *Daubert* pre-trial hearings or *Frye* hearings in those states that have not adopted *Daubert* standards) concerning the adequacy of proposed scientific experts and their

28. Stephanie Tai, *Uncertainty About Uncertainty: The Impact of Judicial Decisions on Assessing Scientific Uncertainty*, 11 U. PA. J. CONST. L. 671, 676 (2009). Scientific theories are considered underdetermined if there is a rival theory that is consistent with the evidence. *See generally* RONALD N. GIERE, SCIENCE WITHOUT LAWS 237–40 (1999) (describing how scientific communities put forth some theories "as true, correct, accepted, the best available, etc." even though such theories are underdetermined).

29. *See, e.g.*, Holly Doremus, *Precaution, Science, and Learning While Doing in Natural Resource Management*, 82 WASH. L. REV. 547, 548 (2007) (uncertainty is "the unifying hallmark" of environmental regulation).

30. Alyson Flourney, *Legislation Inaction: Asking the Wrong Questions in Environmental Decisionmaking*, 15 HARV. ENVT'L. L. REV. 327, 386–87 (1999).

31. *See, e.g.*, Bockrath v. Aldrich Chem. Co., 980 P.2d 398, 404 (Cal. 1999).

32. *See, e.g.*, Whiteley v. Philip Morris, Inc., 11 Cal. Rptr. 3d 807, 862 (Ct. App. 2004).

testimony.[33] Such decisions involve a "yes" or "no" answer, and any substantial doubt on the part of the gatekeeping judge, perhaps due to substantial uncertainty in the science underlying the expert's testimony, will lead to a "no."[34] Judges, unlike regulators, do not wait for more studies or for reductions of uncertainty levels before taking action.

Despite the doubts raised in *Daubert* by Justice Rehnquist's dissent[35] concerning the capacity of judges to make scientific judgments, they do and must in the post-*Daubert* gatekeeping regime.[36] All the talk of "junk science" in the decades leading up to *Daubert*, together with the implied charge in *Daubert* to root out junk scientists from the courtroom, resulted in an unfortunate tendency to characterize scientific disagreements between two experts as the result of one of them being a charlatan and the other delivering scientific truth. Moreover, despite the reference to "shaky" scientific evidence in *Daubert*,[37] without the slightest suggestion that the attorneys proffering such evidence were unethical, the notion that lawyers have a duty to evaluate the validity of their proffered expertise has been lurking in post-*Daubert* scholarly discourse.[38] The recent phenomenon of a crisis in forensic science has revived that notion, particularly with regard to a higher duty on the part of prosecutors to "voluntarily refrain from using potentially unreliable evidence."[39] Moreover, the image of any attorney proffering expert testimony that the attorney suspects is false is powerful, making the duty to stop such behavior appear common-sensical and rendering counter-intuitive the ethical rules that actually allow such evidence to be presented. While there may be difficulties associated with evaluations of scientific reliability on the part of lawyers, the fact that judges do and must perform such evaluations gives a certain credence to the task.[40] Thus, the difficulties of scientific evaluation have been eclipsed by debates over whether the ethical rules currently require attorneys to evaluate the reliability of their proffered expertise[41] or whether ethical reforms are

33. *See* 4 WEINSTEIN'S FEDERAL EVIDENCE § 702.02[3] (2d ed. 2001) [hereinafter WEINSTEIN].

34. *See generally id.*

35. *See* Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 600–01 (Rehnquist J., dissenting) (doubting the capacity of trial judges to become amateur scientists).

36. *See* WEINSTEIN, *supra* note 33, at § 702.02[3].

37. *Daubert*, 509 U.S. at 596 (referring to "shaky but admissible evidence," appropriately attacked by "contrary evidence" or "[v]igorous cross-examination").

38. *See generally* Michael J. Saks, *Scientific Evidence and the Ethical Obligations of Attorneys*, 49 CLEV. ST. L. REV. 421, 421 (2001) (considering the question, "What are the legal and ethical responsibilities of attorneys when offering scientific expert evidence to courts?").

39. Moriarty, *supra* note 23, at 24.

40. *Id.* at 23.

41. *Id.*

needed to establish such a requirement.[42]

I hope to show that the trend toward greater ethical duties on the part of lawyers to "vet" their experts is based on an unrealistic view of the scientific enterprise *and* of the role of advocates. While I agree that prosecutors have higher duties than lawyer-advocates in the fields of civil litigation and criminal defense, to say that the duties of every lawyer include, or should include, a duty to evaluate the scientific reliability of proffered expertise is more problematic that it seems.

A. The Ongoing Debate

> *A lawyer's reasonable belief that evidence is false does not preclude its presentation to the trier of fact.*
>
> Model Rules of Professional Conduct[43]

The ethical rules regarding presentation of evidence are familiar: lawyers cannot present evidence *known* to be false and may refuse to offer evidence reasonably believed to be false—the latter aphorism confirms, indirectly, that evidence reasonably believed to be false can indeed be offered.[44] At this point, the debate begins, and exceptions begin to develop. First, knowledge of falsity can be inferred from the circumstances.[45] So, unlike the Virginia interpretation of the prohibition against *knowingly* presenting false testimony, which requires that the witness acknowledge the fraud[46]—perhaps a rarity—an attorney may be deemed to have actual knowledge of falsity—that is, second-guessed—when that falsity is obvious to everyone else. Second, the belief, not knowledge, that evidence is false must be reasonable—if the lawyer has a very strong belief in falsity, whatever doubt there is may not qualify as "genuine and reasonable."[47] Thus, a "strategic" belief in falsity may be transformed into actual knowledge. Third, there is the suggestion that knowledge of falsity can be imputed if the lawyer *should have known* but for some reason claims not to have known of the falsity.[48] Therefore, it is not really fair to attorneys to

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42. *See* David S. Caudill, *Advocacy, Witnesses, and the Limits of Scientific Knowledge: Is there an Ethical Duty to Evaluate Your Expert's Testimony?*, 39 IDAHO L. REV. 341 (2003).

43. MODEL RULES OF PROF'L CONDUCT R. 3.3 cmt. 8 (2002).

44. *Id.* R. 3.3. The indirect language persists in comment 8, which states that reasonable belief in falsity "does not preclude" presentation—the drafters refuse to say "*It can be presented*!"

45. *Id.* R. 3.3 cmt. 8 & R. 1.0(f).

46. Virginia Code Comm., Formal Op. 1650 (1995).

47. *See* GEOFFREY C. HAZARD & W. WILLIAM HODES, THE LAW OF LAWYERING: A HANDBOOK ON THE MODEL RULES OF PROFESSIONAL CONDUCT § 3.3:401 (2nd ed. Supp. 1992) ("If the lawyer's uncertainty is genuine and reasonable, he can present the evidence without risk of violating Rule 3.3.").

48. *See* Caudill, *supra* note 42, at 344–48. For example, in *Harre v. A.H. Robbins Co.*, 750 F.2d

interpret the current rule as allowing attorneys to present all kinds of shaky evidence without regard to its potential falsity—it cannot be presented if the attorneys knows it is false or if a reasonable attorney would know it is false, *or* if the attorney's doubts about its falsity are not genuine and reasonable.

Professor Michael Saks, nearly a decade ago *and* in the context of a symposium focused on the problem of unreliable criminal forensics, argued in favor of an attorney's duty to evaluate proffered scientific expertise; it appeared to Saks that under the current rule, "ignorance is bliss for both the proffered expert and the attorney . . . indeed the attorney would be rewarded for not going to the trouble to learn about the expertise."[49] This raises the possibility of a fourth exception, expressed as a duty of due diligence and reasonable inquiry when, for example, an attorney has doubts about the truthfulness of a client's testimony.[50] There is precedent for such a duty in cases involving the obligation to reveal client fraud on the court.[51] But the question is whether a client's false testimony (when the client knows the truth is otherwise, and the attorney could find the truth with some effort) is analogous to inadmissible scientific testimony. For example, if a client in an immigration case proposed to testify that she came to the United States on a particular date, and her attorney doubts that the testimony is true, what ethical obligations arise? If the attorney confronts the client who admits the testimony is not true, such that the attorney *knows* of the falsehood, then the testimony cannot be ethically presented; if a reasonable inquiry into the client's file or governmental records could confirm the falsehood, then the attorney *should have known* or will be deemed to know of the falsehood, and the testimony likewise cannot be ethically presented.[52] It is the assumed analogy between (i) confirming the falsehood in client files or governmental records and (ii) confirming the falsehood of the testimony of a scientific expert by a reasonable inquiry into "science" that supports the notion that expert testimony should not be presented if a reasonable inquiry into the

1501 (11th Cir. 1985), *vacated in part by* 866 F.2d 1303 (11th Cir. 1989), an expert testified contradictorily in two cases, and thus the expert's counsel (the same attorney in both cases) "knew or should have known of the falsity of the testimony." 750 F.2d at 1503. In *McNeill v. Atchison, Topeka & Santa Fe Ry. Co.*, 878 F. Supp. 986 (S.D. Tex. 1995), a railroad employee, who had won a verdict for permanent disability based on the testimony of medical experts, filed a discrimination action because his employer would not re-hire him; his attorney was deemed to have known about his obvious fraud. 878 F. Supp. at 990–91.

49. Saks, *supra* note 38, at 427. I will return to and criticize this compelling argument and its obvious appeal in Section III of this Article.

50. *See* Virginia Code Comm., Formal Op. 1087 (1992).

51. *See id*. Under the Virginia code, it is improper for attorney to take client's representations at face value if, "in the exercise of due diligence upon reasonable inquiry . . . the attorney should know of information to the contrary." *Id.*

52. *Id.*

scientific literature would confirm its invalidity. Again, in the context of a discussion about the lack of empirical support for many fields of forensic science, the analogy tends to work quite well.

Saks's argument at the symposium, therefore, seemed eminently reasonable: Attorneys should be "obligated to acquire a good faith basis for believing . . . that . . . proffered expertise is valid."[53] Validity, in the language of *Daubert*, is a requirement for admissibility and simply means, as Saks explained, that purportedly scientific evidence has a foundation in scientific methodology and data; it does not mean "true" or "correct" or that inconsistent expertise will not also be admissible.[54] Model Rule 3.1 already requires that a "lawyer shall not . . . assert an issue [in a proceeding] unless there is a basis in law and fact for doing so that is not frivolous,"[55] and Comment 2 states that lawyers are to "inform themselves about the facts of their client's cases . . . and determine that they can make good faith arguments in support of their client's positions."[56] This current rule seems to support an obligation to vet experts. However, an "action is not frivolous even though the lawyer believes that the client's position ultimately will not prevail,"[57] which means that Saks's "good faith basis for believing" might be a stronger formulation.[58] Indeed, Saks defined "good faith belief" as being able to (i) make a "well-grounded showing" that proffered evidence satisfies relevant admissibility (i.e., validity) criteria and (ii) "reach a considered judgment that it is valid and . . . make a sound case . . . that it ought to be admitted."[59] Here, Saks began to veer away from existing ethical guidelines, not with respect to the ability to make a well-grounded showing or a sound case in good faith, but with the "considered judgment that it is valid."[60]

Lawyers are currently permitted to proffer expertise that they reasonably believe is false, as long as they do not know it is false, because they "are not required to present an impartial exposition . . . or to vouch for the evidence submitted . . . ."[61] Saks wanted lawyers to "defend [their expert's] claims of validity to themselves,"[62] phraseology which suggests that Saks did not simply mean admissibility when he used the term "valid;" in Saks's example, handwriting examiners betray a "personal faith in the validity of what they do" even after "the field's weaknesses [i.e., no valid scientific

53. Saks, *supra* note 38, at 426.
54. *See id.* at 422; *infra* note 79.
55. MODEL RULES OF PROF'L CONDUCT R. 3.1 (2002).
56. *Id.* R. 3.1 cmt. 2.
57. *Id.*
58. *See* Saks, *supra* note 38, at 426.
59. *Id.* at 428–29.
60. *Id.* at 429.
61. MODEL RULES OF PROF'L CONDUCT R. 3.3 cmt. 2 (2002).
62. *See* Saks, *supra* note 38, at 429.

basis] have been exposed and judged."[63] The handwriting examiner in Saks's example presumably has faith in his field's accuracy or correctness, not in its admissibility.[64] For Saks, it was not difficult to "look below the surface" and see such testimony as "false or misleading."[65] Saks was not discussing "shaky" evidence that might be admissible, proffered in good faith by an attorney who doubts that it is true or even admissible; instead, he was discussing misleading testimony—handwriting expertise that has not been subjected to sufficient testing to establish its reliability.[66] Even though a "lawyer should not conclude that testimony is . . . false unless there is a firm factual basis for doing so,"[67] the "firm factual" basis was clear in Saks's example.[68] In short, while the conventional categories in the ethics of proffering expertise include (1) known falsity (unethical to proffer), (2) reasonable doubt about falsity (ethical to proffer), and (3) confidence in one's expert (ethical to proffer),[69] Saks's example shifted the categories to (1) known falsity (unethical to proffer), (2) lazy failure to investigate validity (unethical to proffer), and (3) confidence in one's expert (ethical to proffer but irrelevant with respect to handwriting expertise).[70]

I do not mean to downplay or minimize the frequency of examples like the one Saks used because many of the fields of forensic science have been shown to have little or no empirical support.[71] Moreover, it does not seem fair to criticize Saks for proposing to *somehow* police the misuse of forensic "science" in criminal contexts, which was clearly Saks's focus (although he expanded his proposal to include, and offered an example from, the civil side of litigation).[72] However, I fear the current focus on the weaknesses of many fields of criminal forensics tends to eclipse the problems of discerning the reliability of many other forms of scientific expertise.[73]

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63. *See id*.
64. *See id.*
65. *See id.*
66. *See id.* at 427 n.22, 428–29.
67. RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 120 cmt. c (2000).
68. *See* Saks, *supra* note 38, at 428–29.
69. *See supra* notes 56–67 and accompanying text.
70. *See* Saks, *supra* note 38, at 428–29; *supra* notes 53, 58–68 and accompanying text.
71. Paul C. Giannelli, *Forensic Science*, 34 J.L. MED. & ETHICS 310, 313 (2006) ("[M]any forensic techniques achieved judicial acceptance before the demanding *Daubert* standards were operative. Consequently, empirical support for many techniques is often lacking . . . .").
72. *See* Sacks *supra*, note 38, at 427.
73. *See, e.g.*, Edmond, *supra* note 15, at 33 ("[P]laintiffs, like criminal defendants, are not always in a position to produce demonstrably reliable expert evidence. Plaintiffs in toxic tort litigation, for example, rarely have the foresight to sponsor prospective epidemiological studies before they become ill.").

B. The Crisis in Criminal Forensics

Even prior to the release of the National Academies of Science report on the weaknesses of forensic science in the criminal law context,[74] ethical concerns had been raised regarding the obligations of prosecutors with respect to dishonest experts.[75] Professor Myrna Raeder highlighted the question of "whether [a forensic] expert's pattern of finding questionable results should put the prosecutor on notice of the likely falsity of the evidence," and concluded that

> willful blindness should not provide an ethical pass. However, I do not believe that the current language of the rules satisfactorily covers this type of misconduct. Therefore, the rules or standards should be modified to provide that a clear pattern of inaccurate laboratory results is adequate to supply knowledge that the testimony in an individual case is likely to be false or misleading.[76]

Professor Jane Moriarty, on the other hand, did find in the ethical rules a foundation for requiring that prosecutors, but not litigators on the civil side, vet their experts for reliability because of the unique responsibility prosecutors have as ministers of justice, not mere advocates.[77] However, like Raeder, Moriarty saw a need for revisions to the rules to confirm a prosecutorial duty to present only reliable evidence.[78] Recognizing the problem of defining "unreliability," Moriarty suggests that the standard be "a factual basis to believe that the proposed evidence is incorrect, inaccurate, incomplete, misleading, substantially flawed, or without solid foundation."[79]

Despite the appeal of such proposals, the examples of weak forensic science seem to join with an assumption that the reliability of proffered scientific expertise is, with some effort, discoverable. Using examples such as visual hair comparison or bite mark evidence, which are easily challenged as unreliable,[80] the assumption can be justified. However, reliability has

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74. *See generally* NATIONAL RESEARCH COUNCIL, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD (2009) (calling into question the validity of many forensic science disciplines); Jules Epstein, *The NAS Report: An Evidence Professor's Perspective*, IT'S EVIDENT, July 2009, http://www.ncstl.org/evident/July,%202009%20Epstein%20SPOTLIGHT ("[T]he Report's findings call into question the degree of certainty testified to by practitioners of 'soft' forensic disciplines, the subjective pattern matching of fingerprints, ballistics, handwriting, tool marks, and tire and shoe print treads. In particular, the Report found an across-the-board inability to validate claims that a correspondence of features between crime scene evidence and a known (e.g., between a latent print left at a burglary and the print of a suspect) proves that the suspect was the sole possible contributor.").

75. *See infra* notes 73–76 and accompanying text.

76. Raeder, *supra* note 23, at 1439.

77. *See* Moriarty, *supra* note 23, at 21–24.

78. *Id.* at 28.

79. *Id.* at 29.

80. *See* Brandon L. Garrett & Peter J. Neufeld, *Invalid Forensic Science Testimony and*

proven to be a significant problem in the post-*Daubert* debate over admissibility, and that problem should not be ignored.

The problem regarding reliability is not simply that attorneys (usually) are not trained in science, because judges (usually) are not either. Judges need to make reliability determinations, so why not lawyers? Rather, the problem is that the role of a judge is to evaluate reliability after hearing arguments from both sides in a pre-trial hearing. The role of a lawyer, on the other hand, is to be a zealous and partisan advocate. To require a decision on scientific correctness presumes that (1) such a decision is unproblematic (as it is in the context of many fields of forensic science) *and* (2) that such a decision is desirable for an advocate. The first presumption involves a mistaken picture of science while the second involves a mistaken picture of law practice.

III. PICTURING SCIENCE

> *Under current structures, where experts are chosen by the parties, efforts to impose an obligation on lawyers to do more to vet their experts seems both unwise and unrealistic.*
>
> Joseph Sanders[81]

In response to Michael Saks's suggestion that an attorney should be ethically "obligated to acquire a good faith basis for believing . . . that [the] proffered expertise is valid,"[82] Professor Joseph Sanders raised a compelling (even to Saks) and pragmatic concern: How would bad faith be determined without expending "substantial resources with limited returns beyond what can already be achieved through admissibility rulings"?[83] By framing his objection in such terms, I think Sanders eclipsed another aspect of the problem with Saks's proposal: What is "a good faith basis for believing" in the validity of one's expert testimony in cases involving complex scientific

Wrongful Convictions, 95 VA. L. REV. 1, 47–63, 67–71 (2009) (discussing hair comparison and bite mark analysis).

81. Joseph Sanders, *Expert Witness Ethics*, 76 FORDHAM L. REV. 1539, 1564 (2007).

82. Saks, *supra* note 38, at 426.

83. Sanders, *supra* note 81, at 1563–64. Saks, however, now agrees with Sanders that the ethical rule he proposed a decade ago would be unworkable because it would be both redundant (regarding *Daubert*) and pointless. Email from Michael J. Saks, Professor of Law and Psychology, Sandra Day O'Connor College of Law at Arizona State University, to David S. Caudill, Professor and Arthur M. Goldberg Family Chair in Law, Villanova University School of Law (Aug. 1, 2010) (on file with author).

testimony?[84]

Due to his focus on criminal forensics, Saks presumed that figuring out the scientific validity of an expert's testimony is a fairly straightforward process, stating the following:

> Any attorney, like any intelligent citizen, who takes the time and effort to research a purported scientific subject has the potential to reach her own conclusions about whether or not the field's beliefs rest on a foundation of data and logic that is solid, soft, mushy, or non-existent. It is hard to think of principled reasons why an attorney should not be obligated to acquire a good faith basis for believing . . . that the proffered expertise is valid . . . as a precondition for ethically offering such expert evidence to a court.[85]

In another formulation, Saks rhetorically asked: Does an "attorney have an obligation to first find out enough about the underlying science claims to have a good faith belief that what is being offered to the court is valid . . . ?"[86] Relying on one's expert's assertions cannot be sufficient because, if it was, "lawyers could properly offer astrologers to courts."[87] According to Saks,

> If what is ethically required is a reasonable good faith belief, it seems inescapable that the attorney could not use a shortcut or proxy test, but would have to at least ask herself: Do I know enough about this subject so that if it were challenged under *Daubert* I could make a well-grounded showing that, at least on current knowledge, it satisfies the relevant validity criteria?[88]

Following *Daubert*, Saks conflated validity and admissibility in a *Daubert* hearing, implying that unless attorneys are required to reach "a considered judgment that [evidence] is valid and . . . can make a sound case to a court that it ought to be admitted," then it would be ethical for lawyers to make "claims of validity to themselves or to courts with . . . the flimsiest of scientific support or none at all."[89]

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84. Regarding the question of when bad faith exists, Sanders, explicating Saks, offered the following example:

> [A] plaintiff's treating physician [who] firmly believe[s] that his patient's cancer was caused by the defendant's chemical even in the face of a body of epidemiologic and animal study evidence indicating no relationship between exposure and this disease . . . . [O]n these facts an attorney would be acting in bad faith if he put the witness on the stand.

Id. at 1563.

85. Saks, *supra* note 38, at 426.

86. *Id.* at 427.

87. *Id.* at 428.

88. *Id.*

89. *Id.* at 429. In *Daubert*, validity is required for admissibility; "proposed testimony must be

My concern is that this proposition implies a picture of science where some amount of time and effort on the part of an attorney will result in an adequate judgment of validity.

A. Background Controversies

> *When agreement about what constitutes scientific knowledge can range so widely that even long-held ideas are challenged, it is not easy to come up with a workable alternative to the Frye [general acceptance] test, which requires the judge to be an arbiter of the views of practicing scientists. Trying to decide which expert is reasoning properly seems a rather difficult task for a court, when even scientists often disagree on how to do it.*
>
> Jan Beyea & Daniel Berger[90]

The picture of science in which the proposal for an ethical obligation to vet experts is rooted was the subject of two controversies that arose in the wake of *Daubert*: (1) the question of whether *Daubert* really provided a reliability standard that supplanted *Frye*, and (2) whether *Daubert* should be recognized as having unwittingly established a particular cultural vision of science.

As to the controversy concerning the *Frye* general acceptance test, the legal discourse immediately following *Daubert* emphasized that *Daubert* replaced *Frye* "with a new standard that places a premium on scientific validity and reliability."[91] That is, judges are required "to scrutinize scientific studies and evidence" and "to screen evidence for conformance to the scientific method and accepted scientific practice."[92] This framework

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supported by appropriate validation—i.e., 'good grounds,' based on what is known." Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 590 (1993). There also must be a "valid scientific connection to the pertinent inquiry as a precondition to admissibility" because "scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes." *Id.* at 591–92. However, "there are no certainties in science," as science "'represents a *process* for proposing and refining theoretical explanations . . . subject to further testimony and refinement.'" *Id.* (quoting Brief for Am. Assoc. for the Advancement of Sci. and Nat'l. Acad. Sci. as Amici Curiae Supporting Respondents at 7–8, Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 590 (1993) (No. 92-102), 1993 WL 13006281). Therefore, validity is not truth or certainty, but "must be derived by the scientific method" to be reliable and admissible. *Id.*

90. Jan Beyea & Daniel Berger, *Scientific Misconceptions Among* Daubert *Gatekeepers: The Need for Reform of Expert Review Procedures*, 64 LAW & CONTEMP. PROBS. 327, 335 (2001).

91. Edward W. Kirson, Daubert v. Merrell Dow Pharmaceuticals*: Active Judicial Scrutiny of Scientific Evidence*, 50 FOOD & DRUG L.J., no. 2, 1995 at 213, 213.

92. *Id.*

suggests that judges do not defer to the views generally accepted by scientists but instead stand in judgment *over* scientific experts, evaluating their testimony for its "reliability." However, as Paul Rice argued,

> The reality is that judges are compelled to return to the same relevant scientific communities for answers. *Daubert* is little more than *Frye* in drag. Judges simply retool *Frye* by anointing a single expert and substituting that expert's opinions for those of the relevant scientific community. The only difference is that the judge lays out the criticism and concerns of the expert as if they were the judge's own . . . .[93]

According to Gary Edmond, a *Frye*-type general acceptance standard was inevitable once *Kumho Tire Co. v. Carmichael*[94] confirmed "the absence of universal features underlying the production of all forms of expertise."[95] Proffers of expertise "have to be assessed against some meaningful standard. Presumably, . . . the field or discipline from which the expert originates will usually provide the appropriate indicators. This means . . . the *Daubert* criteria . . . must always be applied via some version of the (general) 'acceptance' test."[96] Rather than *replacing* acceptance with a reliability standard, reliability "is indexed to the specific standard of acceptance required."[97] Reliability, that is,

> will depend upon whether the jurisdiction requires near universal acceptance, general acceptance or the acceptance of a distinguished or substantial minority in a field. All proffers of expertise, then, inescapably require some image of the field and some sense of the degree of acceptance, invariably linked to the requisite level of *reliability*.[98]

Numerous other questions have been raised concerning how revolutionary *Daubert* really was, including the intense attention given to admissibility standards in the decades before *Daubert*,[99] as well as the observation that admissibility determinations are often quite similar in *Frye*

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93. Paul Rice, *Truth in Test Tubes: Standard for Screening Scientific Evidence is Still Muddled Years After* Daubert, LEGAL TIMES, Oct 16, 2000, at 85, *available at* 2000 WLNR 10521423.

94. 526 U.S. 137 (1999).

95. Gary Edmond, *Deflating* Daubert*:* Kumho Tire Co. v Carmichael *and the Inevitability of* General *Acceptance (*Frye*)*, 23 U.N.S.W. L.J., no. 1, 2000 at 38, 53 (discussing *Kumho Tire*).

96. Edmond, *supra* note 95, at 53–54.

97. *Id.* at 54.

98. *Id.*

99. *See, e.g.*, SCIENCE, TECHNOLOGY AND JUDICIAL DECISION-MAKING: AN EXPLORATORY DISCUSSION (D. Nyhart ed., 1981) (proceedings of a 1977 conference anticipating the turn toward more active judicial gatekeeping with respect to expert scientific testimony).

and *Daubert* jurisdictions.[100]

For my purposes, the notion that courts under *Daubert* do not defer to the scientific community is related to a vision of science as an accessible "catalog of truths" rather than "a contentious process." The former tends to demand "more of individual scientists and engineers than is expected of them in their own research and practice."[101] This vision can be called the "Science as Logical Reasoning" school of thought, identified by Beyea and Berger as comporting "with the popular concept of a scientist doggedly collecting irrefutable facts, step by step, and placing them in logical order. Lay judges are most likely to approach science with this ideal in mind, requiring scientists to make generalizations from observations or data to general laws of nature."[102] Scientific knowledge, according to this view, "exists as chunks of data bound together by logical propositions that can be identified objectively."[103]

By contrast, the "Science as Process" school of thought, associated with Popper and Kuhn, includes logic alongside "intuition, conjecture, inference, professional judgment, and repeated testing" as features of science.[104] This view also acknowledges the subjective elements involved in each step of the production of scientific knowledge.[105] Both schools of thought, however, find support in *Daubert*.

Those who read *Daubert* as having institutionalized the view that science is characterized by logical reasoning can appeal either to scientific consensus as the marker of reliability or to the ease by which the characteristics of valid scientific knowledge and reasoning may be

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100. *See, e.g.*, Pamela J. Jensen, Note, Frye *versus* Daubert*: Practically the Same?*, 87 MINN. L. REV. 1579, 1580–81, 1619 (2003) (variation in treatment of scientific evidence "does not correlate with the adherence to *Frye* or *Daubert* admissibility standards"); David E. Bernstein, Frye, Frye, *Again: The Past, Present, and Future of the General Acceptance Test*, 41 JURIMETRICS 385, 388, 393 (finding that *Frye* is converging with *Daubert* and courts in *Frye* jurisdictions are beginning to scrutinize expert methodology and reasoning); *see also* MICHAEL D. GREEN, BENDECTIN AND BIRTH DEFECTS: THE CHALLENGES OF MASS TOXIC SUBSTANCE LITIGATION 311 (1996) ("[P]ost-*Daubert* toxic substances decisions look very much like those that were decided before it, save for empty obeisance to *Daubert*.").

101. *See* Beyea & Berger, *supra* note 90, at 328.

102. *Id.* at 330. The authors associate this view of science with John von Neumann, who

> seemed to regard the empirical world, probably even life and mind, as comprehensible in terms of abstract formal structure. . . . He seems to fall under that tradition of Western thought in which it is believed that only rigorous logic will ever succeed in containing the timeless, universal truths that govern everything.

Id. at 330 n.15 (quoting STEVE J. HEIMS, JOHN VON NEUMANN AND NORBERT WIENER: FROM MATHEMATICS TO THE TECHNOLOGIES OF LIFE AND DEATH 129–30 (1980)).

103. *Id.* at 330.

104. *See id.* at 331–32.

105. *See id*. at 332.

grasped.[106] However, consensus "on what constitutes scientific knowledge ranges from the near-universal to the hotly contested."[107] Moreover, "scientists can have vastly different opinions, even contradictory ones, and still be legitimate parts of the [complex] network [of interacting scientists] . . . . Criticism of scientist by scientist is not uncommon . . . . When two scientists criticize each other in the courtroom, it does not mean that one must be wrong."[108]

Just as judges are operating under an idealized vision of science when they assume that disagreement among experts means one must be lying, I argue below that attorneys should not presume to pre-judge their own expertise in complex scientific disputes.

B. Questionable Assumptions

> *In [toxic tort] suits there is often considerable uncertainty, dispute, and controversy concerning the factual conclusions at issue. In many cases . . . it may be unclear whether toxic substances cause cancer in human beings. Thus, there may be no well-established consensus against which to measure the scientific validity of a particular legal judgment.*
>
> Carl F. Cranor[109]

The foregoing remark was a challenge to Bert Black's selection of *Wells v. Ortho Pharmaceutical Corp.*,[110] in which the verdict "ignored a well-established scientific consensus," to bolster his argument that courts should hold experts to scientific standards of evidence.[111] Professor Carl Cranor notes that "the class of examples where a . . . decision . . . is contrary to *widely* held views in the scientific community is easily distinguishable from other cases in which the outcome depends upon a 'battle of bona fide

106. *See id.* at 334; *see also* Bert Black et al., *Science and the Law in the Wake of* Daubert*: A New Search for Scientific Knowledge*, 72 TEX L. REV. 715, 753 (1994).

107. Beyea & Berger, *supra* note 90, at 338. Beyea and Berger are critical of Bert Black and his co-authors' reliance on consensus because they give no "examples where there might not be a consensus." *Id.* at 334; *see also* Haack, *supra* note 10, at 10–11 ("[T]here are no rules determining when a scientific claim is well enough warranted by the evidence to be accepted . . . .").

108. Beyea & Berger, *supra* note 90, at 338, 340. The authors are critical of Bert Black and his co-authors' view that "the characteristics of valid scientific knowledge and the kind of reasoning that produce it are not difficult to grasp." *Id.* at 335–36 (internal quotation marks omitted) (quoting Black et al., *supra* note 106, at 753). "If this is so easy, one wonders why the recognition of invalid science cannot be left up to juries." *Id.* at 336.

109. CARL F. CRANOR, REGULATING TOXIC SUBSTANCES: A PHILOSOPHY OF SCIENCE AND THE LAW 62 (1993).

110. 788 F.2d 741 (11th Cir. 1986), *reh'g denied en banc*, 795 F.2d 89 (11th Cir. 1986)

111. CRANOR, *supra* note 109, at 62 (discussing Bert Black, *A Unified Theory of Scientific Evidence*, 56 FORDHAM L. REV. 595, 672–74 (1988)).

experts.'"[112] Without regard to the debate over judicial admissibility standards, the tendency to select easy cases persists in recommendations for an ethical duty on the part of lawyers to vet their proffered expertise. Forensic science horror stories,[113] and "the wave of DNA exonerations" where "forensic science has played a large part in those erroneous convictions,"[114] offer compelling examples. On the civil side, the example of proffering a physician who believes and testifies that a chemical caused cancer, "even in the face of [contrary] epidemiologic and animal study evidence," can also be offered in the abstract as a case of unethical conduct.[115] There seems to be an assumption that we, and the attorney, simply *know* that the physician's testimony is wrong. However, Cranor explains:

> Epidemiological studies . . . may provide the best evidence that [a] substance is carcinogenic . . . . Whether they do . . . depends upon whether they suffer some possible practical and theoretical difficulties. Practical evidence-gathering problems such as poor recordkeeping, job mobility (for work place studies), and exposure to more than one toxin may frustrate good studies. And long latency periods for diseases typically caused by carcinogens make it difficult to conduct well-done, reliable studies. [And] even if *none* of these problems exist, theoretical considerations indicate that in many circumstances the design and interpretation of such statistical studies . . . [create] the possibility that risks of concern may go undetected, because the power of the test may be quite low . . . .[116]

Epidemiologists make trade-offs in terms of costs, sample sizes, avoidance of false positives, and relative risk; moreover, "the same trade-offs may be forced in animal studies . . . ."[117] None of which is to say that epidemiologic studies are unreliable, but only that there are limitations: "[M]ost studies have flaws. Some flaws are inevitable given the limits of technology and resources. In evaluating epidemiologic evidence, the key questions . . . are the extent to which a study's flaws can be assessed and

112. *Id.*
113. *See* Raeder, *supra* note 23, at 1420–21 ("[P]rosecutors should be on the lookout for inaccurate or misleading testimony when offering an expert who presents statistics without scientific basis or relies on questionabl[e] . . . techniques, such as hair or bite mark analysis.").
114. Saks, *supra* note 38, at 423 *See generally* Garrett & Neufeld, *supra* note 80.
115. *See* Sanders, *supra* note 81, at 1563.
116. CRANOR, *supra* note 109, at 29, 40.
117. *Id*. at 36.

taken into account in making inferences."[118]

That is why in the example above involving a physician claiming causation in the face of contrary epidemiologic and animal study evidence, a question arises as to whether the plaintiff's attorney is ethically required to interpret that contrary evidence as conclusive. If the example were to be modified to include numerous well-designed and powerful epidemiological, animal, and in vitro studies contradicting the plaintiff's claim, such that the only evidence supporting the physician's claim was temporal order, I would concede that plaintiff's counsel should, even under current ethical rules, question whether there is a "basis in law and fact . . . that is not frivolous."[119]

Saks's specific examples were a sincere physician willing to testify to causation when *no* grounds exist and an expert who is willing to testify to a fact that *no* scientist would accept.[120] In those cases, Saks suggested, the attorney should "find out enough about the underlying science claims" to determine, or at least reach a good faith belief in, the validity of the expert's testimony.[121] That sounds reasonable, given the extreme hypotheticals and the *current* ethical framework requiring good faith arguments,[122] but many cases will likely not be so easy—what if there are minimal or shaky grounds (i.e., not "*no* grounds," but also not *strong* grounds) for the physician's testimony, or what if the expert in the second example finds a few scientists who would accept his fact?[123] An attorney faced with such an expert should, Saks seemingly suggested, do some research and make a decision on validity and admissibility in advance of the *Daubert* hearing or trial.[124]

Steven Lubet, in answer to the question of when an attorney has "a reasonable belief as to the admissibility of evidence," replies that such a "determination lies within the thought processes of the individual lawyer."[125] That answer suggests that an ethical obligation to vet an expert would be unworkable, but the "good faith" standard in legal ethics, applied, for

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118. Michael Green, D. Michael Freedman, & Leon Gordis, *Reference Guide on Epidemiology*, *in* FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 337 (2d ed. 2000).

119. MODEL RULES OF PROF'L CONDUCT R. 3.1 (2002).

120. *See* Saks, *supra* note 38, at 427.

121. *Id.*

122. *See* MODEL RULES OF PROF'L CONDUCT R. 3.1 cmt. 2 (2002).

123. *See, e.g.*, Searles v. Fleetwood Homes of Pennsylvania, Inc., 878 A.2d 509 (Me. 2005). In *Searles*, the admission of a physician's testimony (that plaintiffs' respiratory problems were caused by volatile organic compounds [VOCs] from mold) was challenged because it was not supported by "peer-reviewed, scientifically verified, and generally accepted studies . . . ." 878 A.2d at 515. The court noted, however, that

> [e]ven if the proposition that fungal VOCs can cause an irritant reaction of the type experienced by the [plaintiffs] has not gained general acceptance, Dr. Upham's testimony and [several] journal articles . . . indicate that the proposition cannot be discounted as the marginal view of a handful of members of the relevant scientific community.

Id. at 517–18.

124. *See* Saks, *supra* note 38, at 427.

125. STEVEN LUBET, MODERN TRIAL ADVOCACY: ANALYSIS AND PRACTICE 295 (3d ed. 2004).

example, to the permission to make a good faith argument challenging existing law, is an objective standard—in other words, would a reasonable attorney have that belief?[126]

At this point, the proposal to require attorneys to vet their proffered expertise becomes unworkable due to the nature of science. One can imagine a disciplinary hearing wherein an attorney, who had proffered shaky scientific evidence, is accused of failing to attain a good faith belief in the validity of her expert's testimony. By framing his ethical concern in terms of validity, Saks's proposal would mean that the evidence in the hearing will be scientific evidence, and one starts to sympathize with Sanders' pragmatic concern that this enterprise would accomplish little more than an admissibility hearing already does (with the added feature that not only will an expert be rejected, but an ethical complaint against the proffering attorney may follow).[127] Indeed, Saks unwittingly imported all of the controversies over admissibility into the realm of ethics—appellate judges often disagree with trial judges about validity,[128] and thus the question of whether the accused attorney's belief was reasonable is not answerable by reference to a stable body of knowledge. Scientific experts at trial also disagree, each side typically claiming to have followed the accepted scientific method. Thus, to presume stability by simply consulting the scientific literature is also unrealistic. The ethical rule only works if science is an uncontroversial field.

In any event, the accused attorney would need to show a good faith belief in the validity, or likely admissibility, of her expert's testimony, after familiarizing herself with the scientific literature in the field. Other attorneys, and presumably scientists, could argue at the disciplinary hearing that no reasonable attorney, and no reasonable scientist, would have reached the same conclusion. Saks offered the example of the handwriting expert in *United States v. McVeigh*,[129] who was not proffered because the U.S. Attorney did not think that such expertise would be admitted under *Daubert*.[130] Many scientific disputes, presumably, would be more complicated, and the potential arises, as Sanders warned, for *Daubert* hearings in disciplinary proceedings.

Significantly, the ethical rules already prohibit attorneys from asserting

126. *See* Bach v. McNeils, 207 Cal. Rptr. 232, 246 (Ct. App. 1989) (a suit is meritless only "where any reasonable attorney would agree that the action is totally and completely without merit" (quoting Finnie v. Town of Tiburon, 244 Cal. Rptr. 581, 587 (Ct. App. 1988)).

127. *See supra* note 84 and accompanying text.

128. *See* CAUDILL & LARUE, *supra* note 10, at 15–47.

129. 153 F.3d 1166 (10th Cir. 1998).

130. Saks, *supra* note 38, at 428 (citing U.S. v. McVeigh, 1997 WL 47724 (D. Colo. Trans.)).

an "issue" in a "proceeding" "unless there is a basis in law and fact."[131] The disciplinary hearing described in the previous paragraph could therefore be framed as concerning a non-meritorious contention. Comment 2 to Rule 3.1 requires that lawyers "inform themselves about the facts of their clients' cases," which would certainly include the scientific facts in the testimony of expert witnesses.[132] Of course, lawyers may offer evidence as long as it is not *known* to be false, but under Comment 8 to Rule 3.3, "A lawyer's knowledge that evidence is false, however, can be inferred from the circumstances."[133] I think this is really what proponents of a duty to vet expertise have in mind—lawyers should not present false testimony, and they should take the time to figure out if their expertise is "false." Once everyone knows that the current technique of bite mark and hair analyses have no scientific basis and have led to erroneous convictions, it is wrong to present such testimony as valid. And the ethical rules already require a determination by a lawyer that "good faith arguments" can be made "in support of their clients' positions."[134]

The problem is that many uses of scientific testimony are not so simple. Probabilities, uncertainties, conflicting theories that are both consistent with the evidence, debates in scientific literature, and dynamic changes in almost every field of science make it difficult for an attorney to identify, using Moriarty's definition (for imposing a higher duty on *prosecutors*), testimony that is "incorrect, inaccurate, incomplete, misleading, substantially flawed, or without solid foundation."[135] Outside of forensic identification techniques, questions about the strengths or weaknesses of particular theories, data-collection techniques, and published studies become very

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131. MODEL RULES OF PROF'L CONDUCT R. 3.1 (2002).

132. *Id.* R. 3.1 cmt. 2.

133. *Id.* R. 3.3 cmt. 8.

134. *Id.* R. 3.1 cmt. 2.

135. *See supra* note 79 and accompanying text; *see also* Haack, *supra* note 10, at 9. Haack suggests that, "[w]here all but the very simplest scientific claims and theories are concerned, the evidence will ramify in all directions; . . . it is almost invariably incomplete; and it is quite often ambiguous or misleading." *Id.* at 9. Moreover, when "the available evidence on some scientific question is seriously incomplete, [scientists] may reasonably disagree . . . ." *Id.* at 10.

> As new evidence comes in, a consensus may eventually form . . . . But there are no rules determining when a scientific claim is well enough warranted by the evidence to be accepted . . . .
>
> Ideally, such consensus would form when . . . the evidence is sufficient; in practice, acceptance and warrant sometimes come apart. This may be . . . the result of the influence or the persuasiveness of some individual or group in the field.

Id. at 10–11. Indeed, Haack remarks, "the law very often calls on those fields of science where the pressure of commercial interests is most severe." *Id.* at 15. And, "[b]ecause the legal system aspires to resolve disputes promptly, the scientific questions to which it seeks answers will often be those for which all the evidence is not yet in." *Id.* at 16. As to relying on peer-reviewed publications as a stable marker of reliability, Haack doubts "that many working scientists imagine that . . . publication after peer review is any guarantee that [a work] is good stuff, or that its not having been published necessarily undermines its value." *Id.* at 19. Finally, "the core business of science is inquiry," and it is "by nature tentative and thoroughly fallibilist." *Id.* at 12.

complicated.[136] The lack of empirical support for bite mark and hair analyses could well change, making even the evaluation of those forensic identification techniques more complex and controversial, and in the field of toxic torts, current knowledge and scientific evidence will certainly change.[137] The debates over low-dose toxicity provide a good example—some scientists arguing that the risk is small; others arguing that the risk is large; and both sides basing their views on newer and better epidemiologic and animal studies.[138]

C. Going Beyond the Easy Case(s)

To be clear, Saks's example of an easy case of inadmissible (or "invalid") evidence assumed a physician with a sincere belief that "his patient's cancer is caused by a chemical made by the defendant," but where "no scientific research has ever been conducted."[139] The physician might think, "When it is conducted I am sure it will bear out my faith and my intuition."[140] Sanders, paraphrasing Saks, added to the hypothetical, presumably to make an even easier case, imagining that the physician is faced with "epidemiological and animal study evidence indicating no" causal relationship.[141] In Saks's hypothetical, the physician had no grounds from either "science" or "scientific literature" on which to base his sincere belief.[142] Of course, if the physician was drawing on clinical experience, and perhaps a differential diagnosis, the example differs from one in which

136. *See, e.g.*, Athina Tatsioni, Nikolaus G. Bonitsis, & John P.A. Ioannidis, *Persistence of Contradicted Claims in the Literature*, 298 J. AM. MED. ASS'N 2517, 2517 (2010) ("Some research findings that have received wide attention in the scientific community, as proven by high citation counts of the respective articles, are eventually contradicted by subsequent evidence."); *see also* David Goodstein, Fed. Judicial Ctr., *How Science Works*, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 13 (2d ed., 2000) (distinguishing between textbook science and the frontiers of science (where theories are vulnerable)). *See generally* Christopher Onslott, *Judicial Notice and the Law's "Scientific" Search for Truth*, 40 AKRON L. REV. 465 (2007) (discussing the evolving nature of scientific knowledge).

137. *See* Carl F. Cranor, *Do You Want to Bet Your Children's Health on Post-Market Harm Principles? An Argument for a Trespass or Permission Model for Regulating Toxicants*, 19 VILL. ENVTL. L. J. 251, 270, 311–12 (2008).

138. *See generally id.* at 270 (arguing that the risk of low-dose toxicity is great; however, "there are gaps in the science"). *But see* Michael Gough & Steven Milloy, *The Case For Public Access to Federally Funded Research Data*, POLICY ANALYSIS, No. 366, Feb 2, 2000, at 5–8, *available at* http://www.cato.org/pubs/pas/pa366.pdf (describing "panic" over endocrine disruptors and how the National Research Council "declared that the endocrine disruptor hypothesis was 'rife with uncertainty' and . . . without clinical or experimental support").

139. Saks, *supra* note 38, at 427.

140. *Id.* at 427 n.21.

141. Sanders, *supra* note 81, at 1563.

142. Saks, *supra* note 38, at 427.

the physician has an intuition wholly unrelated to his clinical background. Because Saks seemed to be implying the latter, my only criticism is that he chose an extreme hypothetical to support a broad rule requiring lawyers to vet proffered expert testimony—how often do physicians selected to testify have no basis at all for their conclusion? When the grounds for a physician's testimony are merely weak (but not non-existent), the situation may be one "of *strong scientific uncertainty*—a phrase . . . [denoting] situations in which a qualified expert proposes to testify on an issue that hard science can resolve, but upon which substantial scientific study has yet to be done . . . ."[143]

In those cases, it can be argued that a physician's testimony (based on examination and the medical history of the plaintiff, the physician's experience, and differential diagnosis) that exposure to a toxic substance caused the plaintiff's injury, even in the absence of "rigorous scientific evidence," should be admitted "when differential diagnosis has eliminated *enough* alternative causes to produce relevant and reliable conclusions."[144]

As to epidemiologic evidence indicating no causal relationship, Sanders's addition to the easy case hypothetical, there is now a critical discourse on both the limitations of epidemiologic evidence and judicial handling of such evidence. For example, Carl Cranor identifies the unfortunate possibility that "judges may take 'no effect' epidemiological studies at face value and conclude that [such studies demonstrate] that exposure does not cause the disease."[145]

> If plaintiffs have offered *some evidence of an effect* based on other kinds of studies, simply because defendants have *no evidence* of an effect in particular epidemiological studies does not show there is evidence of no effect; it should not trump plaintiffs' evidence. Defendants' evidence could trump plaintiffs' other evidence . . . only if . . . *there was evidence of no effect* from human studies and it . . . overwhelmed plaintiffs' evidence . . . . However, this is an extremely difficult showing to make.[146]

Epidemiologist Sander Greenland shows how evidence of no causal relationship—the testimony of an epidemiologist "that exposure [to the

143. Note, *Navigating Uncertainty: Gatekeeping in the Absence of Hard Science*, 113 HARV. L. REV. 1467, 1468 (2000).

144. *See id*. at 1469, 1470 nn. 15 & 18, 1474. The author proposes a framework by which "a trial judge might weigh the results of differential diagnosis, as well as the probative value of the temporal proximity between alleged cause and effect." *Id*. at 1470, *see also id.* at 1474–80 (describing the framework). The framework is then applied to the *Moore* and *Heller* cases, concluding that the trial court was arguably wrong in *Moore*, but right in *Heller*, to disallow differential diagnosis testimony. *See id.* at 1481–84.

145. CRANOR, *supra* note 109, at 243.

146. *Id.* at 244–45.

chemical] does not pose a risk of the disease"—can be misleadingly constructed out of "no effect" studies.[147] Greenland refers to the testimony of a cancer epidemiologist who explained to the court that risk evaluation under the scientific method always begins with the null hypothesis (no increased risk), and if no increase in the disease is observed, the null hypothesis is accepted.[148] Greenland considers such testimony discredited and states that "[i]nstead of maintaining a hypothesis until forced to give it up, a good scientist should regard any hypothesis (including a null one) as conjectural, seek and welcome refuting evidence, and willingly abandon the hypothesis when faced with an alternative hypothesis that better explains or fits the evidence."[149]

Greenland then criticizes the expert's strong assertion on the grounds of logic ("misrepresenting an expression of uncertainty . . . as support for a . . . certain assertion favoring the defense"[150]) and statistics (insignificance "of the null hypothesis leaves open the possibility that there are hypotheses more compatible with the data"[151]), as well as failure to address the validity of statistical assumptions, the cost of false negatives, and extant criticism of the expert's viewpoint.[152] Greenland concludes that experts should be encouraged "to give a moderated perspective that shows grades of confidence over the full range of possible effects" rather than to testify with pretended certainty.[153]

Andrew Jurs similarly highlights the limitations associated with epidemiologic evidence in his study of judicial handling of complex scientific testimony.[154] Jurs notes that the field of epidemiology not only lacks "consensus among researchers," but that courts use "epidemiologic definitions beyond the scope of what researchers would do in the lab" and have trouble with their "statistical language of risks and probabilities."[155] Moreover, by creating bright line rules, such as the doubling-of-the-risk

147. Sander Greenland, *The Need for Critical Appraisal of Expert Witnesses in Epidemiology and Statistics*, 39 WAKE FOREST L. REV. 291, 295 (2004).

148. *See id.*

149. *Id.* at 296.

150. *See id.* at 296–97 ("[L]ogically, 'being uncertain' not only means one cannot reject the [null] hypothesis . . . ; it also means one cannot reject the hypothesis that there is an effect.").

151. *See id*. at 297–301.

152. *See id.* at 301–07.

153. *Id*. at 309–10.

154. *See* Andrew W. Jurs, *Judicial Analysis of Complex and Cutting Edge Science in the* Daubert *Era: Epidemiologic Risk Assessment as a Test Case for Reform Strategies*, 42 CONN. L. REV. 49 (2009).

155. *Id.* at 70, 73, 75 (quoting *In re* Joint E. & S. Dist. Asbestos Litig., 52 F.3d 1124, 1128 (2d Cir. 1995)).

approach,[156] courts sacrifice "scientific validity at the altar of certainty . . . [covering] the uncertainty inherent in . . . epidemiologic analysis with a veneer of objectivity."[157] Finally, the "acceptance of epidemiologic relative risk as the *sine qua non* of causation in toxic torts is an example of the science within the courtroom clearly diverting away from the mainstream practice of science."[158] In Cranor's assessment, "[I]t is simply a mistake to think that epidemiological studies are necessary for scientists to form reasonable views about toxic effects in humans. Because of limited evidence, consensus scientific bodies in fact frequently utilize various kinds of nonepidemiological evidence in combination."[159] Well-designed epidemiological studies of sufficient duration, with large samples that are sufficiently sensitive, are the most direct evidence of human harm, but "various scientific problems, limitations, shortcomings, and weaknesses . . . affect their usefulness, especially in toxic tort suits."[160]

My point is simply to problematize the supposed easy case where it would be unethical to proffer the testimony of a physician in the face of contrary epidemiologic and animal evidence. Of course, the hypothetical could be refined by making the epidemiologic evidence nearly bullet-proof and the physician's testimony a mere hunch, but in a variation of Cranor's argument that excellent evidence makes bad law because courts might expect that level of certainty in every case,[161] extreme examples of unethical conduct may make bad ethical rules. As a general rule, I do not agree with Saks that any attorney can, with some time and effort, reach a "good faith basis for believing . . . that . . . proffered expertise is valid . . . as a precondition for ethically offering" such evidence.[162] If scientists only speak in terms of probability (degrees of certainty),[163] and if the opposing experts in a case are credentialed scientists who disagree, why would a lawyer be so presumptuous? Of course, a good faith belief in validity is not absolute certainty and could simply represent a belief in admissibility in a *Daubert* hearing. In other words, an attorney should pre-judge admissibility before the judge has a chance to decide. The problem is that an attorney may not know whether a proffered expert's testimony is valid or invalid, or

156. *See* Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311, 1321 (9th Cir. 1995) (explaining that relative risk above 2.0, where the chance of illness from exposure exceeds the background chance of illness from all other causes, equals the "more likely than not" standard of preponderance of the evidence).

157. Jurs, *supra* note 154, at 76.

158. *Id.* at 79.

159. CRANOR, *supra* note 109, at 224–25.

160. *Id.* at 225.

161. *Id*. at 157. Bendectin may be one of the best studied substances ever because "exposure information was quite good, the studies were comparatively quick to conduct, and large groups of exposed individuals were available." *Id* at 202.

162. *See* Saks, *supra* note 38, at 426.

163. *See generally* Jurs, *supra* note 154, at 76.

ultimately admissible, and Saks seemed to be suggesting that such testimony should not be offered. The next question is whether that perspective is consistent with the role of an advocate.

IV. THE LIMITS ON ADVOCACY, REVISITED

> *A competent lawyer will shop for experts with views favorable to the lawyer's case, and will attempt to deny use of unfavorable experts by the opposing side (e.g., by attempted disqualification in pre-trial maneuvers; by attempted impeachment in cross-examination; or by retaining, but not naming or using, unfavorable experts, thus denying them to the opposing side).*
>
> Sander Greenland[164]

That "anthropological" observation by an epidemiologist who is experienced in litigation[165] provides a basis for the argument that attorneys should shoulder a large part of the blame for the perceived problem of junk science in the courtroom. Indeed, in his recent proposal for "a new remedy for the misconduct of knowing proffer of inadmissible evidence," namely allowing the opposing side to treat it as an admission of the weakness of one's case, Professor Imwinkelried seeks harsher punishment for attorney misconduct.[166] Imwinkelried did not discuss known proffers of inadmissible *expert* testimony, but he clearly views similar examples as wrongful. Edward Cheng, in response to Imwinkelried, notes that the notion of "clear inadmissibility" is "difficult to locate," and Cheng would not identify proffers of technically inadmissible evidence with "perjury, fabrication, and spoliation."[167] Those who seek to impose a duty on attorneys to vet proffers of expert evidence seem to make the analogy between fabrication and proffers of inadmissible evidence, and to imagine that locating clear inadmissibility is not so difficult.

The proposed duty to vet expert evidence is difficult to construct under the current Rules of Professional Conduct. Rule 3.3 prohibits offering

164. Greenland, *supra* note 147, at 292.
165. *Id.* at 291.
166. Edward J. Imwinkelried, *Poetic Justice in Punishing the Evidentiary Misdeed of Knowingly Proffering Inadmissible Evidence*, 7 INT'L COMMENT. ON EVIDENCE, Issue 1, art. 6, 2009, at 1, 2, http://www.bepress.com/ice/vol7/iss1/.
167. Edward K. Cheng, *Response: Are Proffers of Inadmissible Evidence Wrongful?*, 7 INT'L COMMENT. EVIDENCE, Issue 1, art. 6, 2009, at 1, 2, http://www.bepress.com/ice/vol7/iss1/art7/.

evidence known to be false; Comment 8 allows a lawyer to resolve doubts in favor of one's clients, but it warns that "the lawyer cannot ignore an obvious falsehood."[168] Lawyers are allowed to offer testimony reasonably believed to be false and have an obligation to present their client's case "with persuasive force," but they do not vouch for submitted evidence.[169] However, these rules are all qualified by the duty of candor toward the tribunal and the warning that "the lawyer must not allow the tribunal to be misled by . . . evidence that the lawyer knows to be false."[170] At times, the assumption on the part of those who seek a general duty to vet expertise seems to be that the validity of scientific expertise is readily ascertainable, with some time and effort, such that any attorney is going to know, or should know, if the proffered evidence is false.

Prosecutors do have a special duty not to mislead the tribunal,[171] and ABA prosecutor standards, like the Model Rules for all attorneys, prohibit knowingly offering false evidence; the commentary warns that such falsity is known if it "reasonably should have been discovered by" the prosecutor.[172] Then the language changes from the Model Rules, because the "mere offer of known inadmissible evidence" is improper—Standard 3-5.6(b) prohibits knowingly offering inadmissible evidence.[173] But because so much unreliable forensic science has been admitted in criminal trials, the argument for requiring prosecutors to vet their expertise for reliability is compelling.

The current rules can be summarized as follows: no attorney may offer evidence known to be false; other than prosecutors, attorneys do not vouch for their evidence and may even present testimony reasonably believed to be false; and prosecutors have a higher duty to avoid offering evidence known to be inadmissible. The proposal to require attorneys to vet their expertise would impose the prosecutors' higher duty on all lawyers and would significantly alter the ability of lawyers to put on the best case possible for their clients—by avoiding known false evidence but otherwise proffering, at times, shaky evidence reasonably believed (but not known) to be false. Just as the "duty of the prosecutor is to seek justice, not merely to convict,"[174] the duty for all attorneys with respect to scientific expertise would be to seek scientific validity, not merely to advocate for one's client. Just as a prosecutor has a "quasi-judicial position" to ensure justice in our adversary system,[175] so should all attorneys, the argument goes, with respect to

168. MODEL RULES OF PROF'L CONDUCT R. 3.3 cmt. 8 (2002).

169. *Id.* R. 3.3 cmts. 2 & 8.

170. *Id.* R. 3.3. cmt. 2. Rule 3.3 also notes that a lawyer may refer to other testimony reasonably believed to be false. *Id.* at R. 3.3(a)(3).

171. *See* BENNETT L. GERSHMAN, PROSECUTORIAL MISCONDUCT § 10:27 (2d ed. 2008).

172. ABA STANDARDS FOR CRIMINAL JUSTICE, PROSECUTION FUNCTION & DEFENSE FUNCTION, Standard 3-5.6(a) cmt. (1993).

173. *Id.*

174. *Id.* Standard 3-1.2(c).

175. *Id.* Standard 3-1.2 cmt.

scientific expertise. By contrast, under the Model Rules, "a lawyer can be a zealous advocate on behalf of a client and at the same time assume that justice is being done."[176]

The *Restatement of the Law Governing Lawyers* offers an expanded rationale for the lawyer's role as an advocate: "Advocates are guided primarily by the goal of advancing their individual clients' interests . . . . They are expected to marshal evidence and legal argument in support of the positions of their respective clients . . . without personal responsibility for the outcome of the proceeding."[177]

This statement appears at the outset of the "Limits on Advocacy" topic, where the prohibition against frivolous advocacy, the duty to disclose adverse legal authority, and the special rules of candor in ex parte proceedings are also discussed.[178] Other limits on advocacy discussed in the *Restatement* include compliance with law and limitations on being a witness and on public comments, as well as the prohibition against presenting false testimony or evidence.[179] Indeed, there are so many limits on advocacy (e.g., prohibitions against influencing or insulting a judge, contact with jurors, or destroying evidence)[180] that *another* limitation on advocacy does not seem startling. However, if the concern over lawyers introducing inadmissible or invalid scientific evidence is a concern that the lawsuit is frivolous, that concern is already addressed by the ethical rules. Beyond that, the suggestion that lawyers should make a personal assessment of the validity of their expert's testimony seems to conflict with the advocate's role. Lawyers are not permitted, for example, to state their personal opinions about the justness of a cause or credibility of a witness,[181] but they are allowed to "argue any position or conclusion adequately supported by [their] analysis of the evidence."[182] The latter freedom comes with the "adequately supported" limitation, but the *Restatement's* commentary on the former limitation notes that the rule

176. MODEL RULES OF PROF'L CONDUCT, Pmbl. 8 (2002).

177. RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS ch.7, topic 2, intro. note (2000).

178. *See id.* §§ 110–12.

179. *See id.* §§ 105, 108–09, 120.

180. *See id.* §§ 113–15, 118.

181. *See* MODEL RULES OF PROF'L CONDUCT R. 3.4 (2002); *see also* RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 107 (2000).

182. RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 107(1) (2000). This rule could be read as a duty to vet experts because if the evidence proffered must support a lawyer's argument, then the evidence must also be valid. Such a reading, however, would be in conflict with the freedom to offer evidence that the lawyer reasonably believes, but does not *know*, is false.

> is designed to prevent interjection of the lawyer's own credibility into the issues to be decided . . . . The rule also preserves the advocate's role as an independent professional agent. Permitting advocates to make personal affirmations would by implication disparage the causes of a client for whom the chosen advocate could not conscientiously vouch, prejudicing the rights of those with unpopular or difficult cases.[183]

When you get to the rule against presenting false evidence, a "lawyer should not conclude that testimony is or will be false unless there is a firm factual basis for doing so."[184] This is the opposite of the proposal to require vetting of experts.

While the adversary system, wherein parties are responsible for and in control of collecting and presenting evidence,[185] is not without its critics,[186]

> the [traditional] reason for this arrangement lies in the belief that each party, driven by self-interest and desire to win, will do the best job of finding evidence and forming arguments in his favor. [This implies that] each party is only responsible for his own case and does not have the obligation to offer evidence or advance arguments in favor of his opponent.[187]

Lon Fuller famously described the importance and distinction in the adversary system of the roles of the judge and jury (who are excluded from partisanship), as opposed to the advocate's role—"[h]is task is not to decide but to persuade"; his (or her) viewpoint is not detached but rather "from that corner of life into whom fate has cast his client."[188] Arguments for each party "must be presented . . . with partisan zeal by one not subject to the restraints of the judicial office."[189] In another formulation:

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183. *Id.* § 107(1) cmt. b.

184. *Id.* § 120 cmt. c.

185. *See* KUO-CHANG HUANG, INTRODUCING DISCOVERY INTO CIVIL LAW 7 (2003).

186. *See* STEPHEN LANDSMAN, READINGS ON ADVERSARIAL JUSTICE: THE AMERICAN APPROACH TO ADJUDICATION 51–67 (1988); *see also* HUANG, *supra* note 185, at 7–8 (the system is premised on both sides having the same resources, which may not be true); *id.* at 17 (risk of attorney manipulation of truth).

187. HUANG, *supra* note 185, at 7.

188. Lon L. Fuller, *The Adversary System*, *in* TALKS ON AMERICAN LAW 36 (Harold J. Berman ed., 1973); *see also* DANIEL MARKOVITS, A MODERN LEGAL ETHICS: ADVERSARY ADVOCACY IN A DEMOCRATIC AGE 3 (2008) ("Unlike juries and judges, adversary lawyers should not pursue a true account of the facts of a case and promote a dispassionate application of law to these facts. Instead, they should try aggressively to manipulate both the facts and the law to suit their clients' purposes. This requires lawyers to promote beliefs in others that they themselves (properly) reject as false. Lawyers might, for example . . . make legal arguments that they would reject as judges.").

189. *Id.*

> The adversary process assigns each participant a single function. The judge is to serve as a neutral and passive arbiter. Counsel are to act as zealous advocate . . . . Each knows what is expected of them . . . . Among the greatest dangers . . . [is] that the attorney will compromise his client's interests if compelled to serve as an officer of the court rather than as an advocate.[190]

Failure to carry out that duty both impedes development of the case and undermines the adversary process. The proposal for an ethical obligation to vet expertise therefore represents a substantial shift in the attorney's role with respect to proffered expertise, from zealous advocate to a kind of neutral, court-appointed scientific expert.

V. CONCLUSION

The reason that the proponents of the duty to vet expertise do not see their proposal as a wholesale challenge to the lawyer-as-advocate model is that, with respect to scientific expertise, they have simply eliminated the category of evidence "reasonably believed to be false."[191] If one wonders whether an expert's views are false, one should do the research necessary to conclude either that it *is* false or that it is valid and therefore admissible. This puts attorneys in the position of judging the validity of expertise, although one need only reach a good faith belief in validity, not absolute certainty.[192] But if Greenland is correct that "acknowledgement of controversy and uncertainty is a hallmark of good science,"[193] this is not always easy.

The real problem with the proposed duty to vet expertise is the proposition that attorneys should come to a good faith belief in validity. What if I am uncertain, that is, I am not really sure if my expert physician's opinion or the other side's epidemiologic evidence is correct? Is that uncertainty a failure to come to a good faith belief in validity or a justifiable uncertainty arising out of a scientific controversy? One could tell me to go back to the literature to settle the controversy. But the attorney's role as an advocate, notwithstanding its limitations in terms of duties of candor to the court, should remain particularly distinct from the judge's and jury's role in resolving such disputes. When Saks said that it "is hard to think of principled reasons why an attorney should not be obligated to acquire a good

190. LANDSMAN, *supra* note 186, at 35.
191. *See* MODEL RULES OF PROF'L CONDUCT R. 3.3 cmt. 8 (2002).
192. *See* Saks, *supra* note 38, at 428.
193. Greenland, *supra* note 147, at 294.

faith basis for believing" that proffered expertise is valid,[194] the reasons that he missed were the complexity of a lot of courtroom expertise and the advocate's traditional role in our adversary system.

194. Saks, *supra* note 38, at 426.