Should Judges Worry About the "CSI" Effect?*

Simon A. Cole & Rachel Dioso-Villa

These days it still seems like everyone is talking about the "CSI effect." Attorneys seem to talk about it all the time. The 258 different articles using the term between 2002 and 2008 that we found through a LexisNexis search are undoubtedly only the tip of the iceberg of media mentions of this supposed phenomenon. Even academics are writing about it—already a handful of books, several dissertations in progress, and numerous scholarly journal articles detail the topic.

Judges are no exception to this phenomenon. A recent survey shows that most judges believe the television program *Crime Scene Investigation* (*CSI)* has increased jurors' expectations for forensic evidence, and many judges believe *CSI* has made it more difficult to convict defendants.[1] In an analysis of 318 newspaper and magazine articles discussing the CSI effect, 27 (8.5%) quoted a judge.[2] Justice Scalia mentioned the phenomenon in an opinion.[3] Judge Harry Edwards, Chief Judge Emeritus of the D.C. Circuit Court of Appeals and Co-Chair of a recent National Research Council (NRC) Committee on improving forensic science, has mentioned the phenomenon a number of times in his speeches about the committee's work.[4] One member of one the most prominent teams of scholars doing empirical research on the CSI effect is a state court judge: Donald Shelton, Chief Judge of the Washtenaw County Trial Court in Michigan.[5] Allegheny County, Pennsylvania Common Pleas Judge John Zottola says, "Jurors' expectations of criminal prosecutions have been altered by these shows."[6] Lansing Hayes, a Kootenai County, Washington 1st District Court Judge, says jurors expect crime scenes to be "dripping with forensic evidence."[7] Chicago Criminal Court Judge Michael Toomin says the CSI effect "is definitely out there."[8] Others, like Prince George's County, Maryland Judge James Lombardi, call claims of a CSI effect "myths."[9] As one judge summed it up:

> [T]his Judge in a number of trials in the last several years or so has witnessed defendants increasingly . . . taking advantage of [the CSI effect] by asking witnesses about tests they know were not conducted and contending in closing argument that the failure to test raises reasonable doubt. They are taking appropriate advantage of a different kind of proof expectations with which some jurors come into the courthouse in the last several years as a result of these programs. It would be naïve not to recognize and acknowledge all of this. This does not mean the Court finds that there is a CSI Effect but, in fact, it means that there is enough of a possibility of it that it cannot be ignored.[10]

These are serious concerns. If they are true, they raise serious doubts about courts' ability to administer justice fairly. Judges, in their dual roles as producers of trials and administrators of courts, would be the individuals expected to take countermeasures to remediate the problem. These countermeasures, however, would be serious indeed, and, in some cases, might even challenge cherished practices of the American system of trial by jury. Judges might, understandably, be inclined to alter these practices only with great caution.

A look at some of the popular and scholarly literature would seem to suggest that judges should start taking action immediately. Media coverage shows remarkably little equivocation about the existence of the CSI effect. Media reports declare that "[t]here is no debating" the reality of the CSI effect,[11] and that "[t]he story lines are fiction. Their effect is real."[12] It is said

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Footnotes

1. Thomas Hughes & Megan Magers, *The Perceived Impact of Crime Scene Investigation Shows on the Administration of Justice,* 14 J. Crim. Just. & Pop. Cult. 259 (2007).
2. This analysis will be published in a forthcoming article.
3. Kansas v. Marsh, 126 S. Ct. 2516, 2529-2539 (U.S. 2006) (Scalia, J., concurring).
4. *See* Harry T. Edwards, Address at Conference on Forensic Science for the 21st Century at Arizona State University: Solving the Problems that Plague the Forensic Science Community (Apr. 3); Harry T. Edwards, *The National Academies of Sciences Report on Forensic Sciences: What it Means for the Bench and the Bar,* Jurimetrics J. (2010).
5. Donald E. Shelton, *Twenty-First Century Forensic Science Challenges for Trial Judges in Criminal Cases: Where the "Polybutadiene' Meets the 'Bitumen,"* 18 Widener L.J. 309 (2009); Donald E. Shelton et al., *A Study of Juror Expectations and Demands Concerning Scientific Evidence: Does the "CSI Effect" Exist,* 9 Vand. J. Ent. & Tech. L. 331 (2006); Donald E. Shelton et al., *An Indirect-Effects Model of Mediated Adjudication: The CSI Myth, the Tech Effect, and Metropolitan Jurors' Expectations for Scientific Evidence,* 12 Vand. J. Ent. & Tech. L. 1 (2009).
6. Maggi Newhouse, *Real-life investigators indict "CSI" for perjury*, Pittsburgh Trib.-Rev., Apr. 13, 2005.
7. Jody Lawrence-Turner, *Popular Shows May Sway Jurors,* Spokane Spokesman Rev., Jan. 27, 2008.
8. Ed Treleven, *The "CSI Effect" on Real Juries*, Wis. St. J., June 19, 2005.
9. Flynn McRoberts et al., *Fact or Fiction? The Jury Is Still out on the CSI Effect*, Chi. Trib., June 5, 2005, at C3.
10. State v. Cooke, 914 A.2d 1078, 1088 (Del. Super. Ct. 2007).
11. Linda Deutsch, *"CSI" and "Law & Order" Lead Jurors to Great Expectations*, Associated Press, Jan. 14, 2006.
12. Glenn E. Rice, *CSI: Courtroom Stalemate Increase*, Kan. City Star, Aug. 10, 2005.

that "TV is driving jury verdicts all across America,"[13] that "TV's False Reality Fools Jurors,"[14] and that "*CSI* Has 'Major Effect' On Real Life Juries."[15] An online journal claims that "[i]n many cases across the nation real-life jurors who are fans of *CSI* has [sic] either caused hung juries or acquitted obviously guilty criminals, claiming the investigators failed to test evidence the way *CSI* does on television."[16] A jury consultant says that "[t]he *CSI* effect is real, and it's profound."[17] The accusations leveled at *CSI* border on charges of jury tampering: one forensic scientist says that *CSI* is "polluting jury pools."[18] The impact of *CSI* is portrayed as irresistible: a prosecutor adds, "Jurors are so influenced by television . . . . that it makes it nearly impossible for us . . . ."[19]

Not only is the media treating the CSI effect as a serious problem, but justice system actors are as well. The FBI has produced a video about it.[20] The Maricopa County Attorney (the presiding prosecutor over much of the major metropolitan area surrounding the city of Phoenix, Arizona) has declared that *CSI* has a "real-life impact on justice" and has called on CBS to insert a disclaimer on the program stating that it is fiction.[21] In addition to concerns about the integrity of the jury system, some prosecutors have claimed that the CSI effect has altered another pillar of the criminal trial—the standard of proof. They have claimed that jurors are now holding them to a *higher* standard of proof than the traditional "beyond a reasonable doubt" standard. In closing arguments, prosecutors have called this higher standard the "TV expectation."[22] Several legal scholars have noted that, while the notion that forensically oriented television programs might influence jurors is theoretically plausible, there is, as yet, no convincing evidence of such an effect.[23] Legal scholars have further noted that, from a theoretical point of view, any media influence on juries would be equally likely to have an effect opposite to that most commonly discussed by the media—that is, forensically oriented television programming might just as easily make juries more conviction prone as more acquittal prone.[24] Legal scholars have also noted that even if media *influences* jurors, that by no means necessarily translates into changed *verdicts*.[25] They have also noted that no increase in reported jury acquittals has been detected.[26] Amidst this uncertainty, what should judges do? Should they keep calm and risk seeming complacent, or should they leap into action and risk changing longstanding judicial practices in response to what may in retrospect turn out to have been little more than media hype?

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In order to help judges decide how to cope with this emerging challenge, this article seeks to provide a sober assessment of both the CSI effect and what we know about it. It will begin by seeking to define the CSI effect. It will show that media reports use this single term to describe at least six distinct phenomena. Some of these phenomena would, if true, clearly be damaging to the delivery of justice; but for others the damage is less obvious. We will suggest that we need to carefully distinguish which of these several "effects" we are discussing when we talk about the CSI effect, whether it is "real," and what to do about it.

Next, we will discuss the empirical evidence that currently exists concerning the CSI effect, paying close attention to which of the several aforementioned "effects" the evidence supports. Given that the empirical support for the CSI effect, as commonly understood, is fairly weak, we will then discuss several alternative explanations for why attorneys, the media, and even academics seem so eager to ascribe "reality" to this phenomenon. Finally, we will discuss several ways in which judges might be expected to try to control or correct for this CSI effect: voir dire, summation, presentation of "negative evidence," and the administration of the courts.

I. WHAT IS THE CSI EFFECT?

The term CSI effect appears to have entered the popular lexicon late in 2002 in an article in *Time* magazine.[27] That article described "a growing public expectation that police labs can do

13. Kit R. Roane & Dan Morrison, *The CSI Effect*, 138 U.S. NEWS & WORLD REP. 49, Apr. 17, 2005.
14. Kate Coscarelli, *The "CSI" Effect: TV's False Reality Fools Jurors,* NEWHOUSE NEWS SERV., Apr. 21, 2005.
15.. *CSI Has "Major Effect" on Real Life Juries,* CBS4 DENV. (May 5. 2005).
16. Clarence Walker, *CSI (T.V. Crime Dramas) Affects the American Criminal Justice System* (June 2005), *available at* http://www.americanmafia.com/Feature_Articles_301.html
17. Amy Lennard Goehner et al., *Where CSI Meets Real Law and Order: Ripple Effect*, TIME, Nov. 8, 2004, at 69.
18. Allison Klein, *Art Trips Up Life: TV Crime Shows Influence Jurors*, BALTIMORE SUN, July 25, 2004, at 1A.
19. *Id.* (quoting Baltimore Deputy Sate Attorney Haven H. Kodeck) (internal quotation marks omitted).
20. DVD: CSI Effect Fact or Fiction (Tom Christianberry, CSI Effect Fact or Fiction, FBI Training Network, DVD video).
21. Maricopa County Attorney's Office, CSI: MARICOPA COUNTY: THE CSI EFFECT AND ITS REAL-LIFE IMPACT ON JUSTICE (June 30, 2005), *available at* http://www.maricopacountyattorney.org/Press/PDF/CSIReport.pdf
22. Boatswain v. State, No. 408,2004, 2005 WL 1000565, at *2 (Del. Apr. 27, 2005) (internal citation omitted); *cf.* Robin Franzen, *TV's "CSI" Crime Drama Makes It Look Too Easy*, OREGONIAN, Dec. 10, 2002, at A1.
23. *See* Kimberlianne Podlas, *"The CSI Effect:" Exposing the Media Myth*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 429 (2006); Shelton et al., *Juror Expectations*, *supra* note 5; Tom Tyler, *Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction,* 115 YALE L. J. 1050 (2006).
24. *See* Podlas, *supra* note 23; Tyler, *supra* note 23.
25. *See, e.g.*, Kiara Okita, *The CSI Effect: Examining CSI's Effects upon Public Perceptions of Forensic Science* (2007) (Master's thesis, University of Alberta).
26. *See* Charles Loeffler, *"CSI" and the Criminal Justice System: Jury Trials,* NEW REPUBLIC, June 7, 2006 (*available at* http://www.tnr.com/doc.mhtml?i=w060605&s=loeffler060706); Simon A. Cole & Rachel Dioso-Villa, *CSI and Its Effects: Media, Juries, and the Burden of Proof,* 41 NEW ENG. L. REV. 435 (2007).
27. Jeffrey Kluger et al., *How Science Solves Crimes*, TIME Oct. 21, 2002, at 36.

everything TV labs can."[28] Even in this early article, the notion of jury taint was present: "This [expectation, forensic scientists] worry, may poison jury pools . . . ."[29] The term appeared a couple of times the following year and more in 2004. In 2005, media coverage of the CSI effect exploded. A LexisNexis search found 56 newspaper and magazine articles mentioning the CSI effect in that year and 78 articles in 2006, the peak year. This coverage included a cover story in *U.S. News & World Report*,[30] as well as coverage in leading science magazines like *National Geographic* and *Scientific American*.[31] Also in 2006, the first full-length book devoted to the CSI effect appeared.[32]

II. A TYPOLOGY OF CSI EFFECTS

The media and its sources use the term CSI effect loosely to denote a remarkable variety of different purported effects.[33] In our earlier work, we proposed a typology of six different specific causal claims that we discerned in the media coverage of the CSI effect, each named for the type of social actor who tended to articulate the supposed effect. Table 1 summarizes each effect. The perhaps canonical effect, which we dubbed the "strong prosecutor's effect," is the claim that television programming is altering juror behavior. Specifically, it is frequently claimed that *CSI* has increased juror expectations for forensic evidence in criminal trials. Because of *CSI,* jurors supposedly expect to see forensic evidence more often and expect it to be more probative. This, in turn, could lead to acquittals in cases where forensic evidence is absent or insufficiently probative. In other words, it is suggested that jurors are acquitting in cases lacking forensic evidence in which they would have convicted but for the creation of *CSI* and similar television programs.

Many prosecutors also make a weaker claim, which we called the "weak prosecutor's effect." This claim posits that *CSI* has altered prosecutor, not juror, behavior. Claimed changes in prosecutorial behavior include questioning potential jurors about their television viewing habits in voir dire, presenting negative evidence testimony, discussing *CSI* in summations, and requesting legally unnecessary forensic tests.[34]

Some defense attorneys advance an opposite effect, which we called the "defendant's effect." The claim is that *CSI* and similar television programming, through their positive and heroic portrayals of state-employed forensic scientists, enhance the perceived credibility of the government's forensic witnesses, thus advantaging the prosecution.

The producers of *CSI,* in rebutting charges that their product is contaminating the criminal justice system, appropriated the term CSI effect and reinterpreted it as an educational effect on the general public. What we called the "producer's effect" holds that *CSI* teaches science to the American viewing public.

The "educator's effect," in contrast, claims that *CSI* is attracting young people into careers in forensic science, much as law programs, such as *L.A. Law*, have been thought to increase law school applications;[35] medical programs, such as *E.R.*, have been thought to influence medical students' choice of specialty[36] (and perhaps medical school applications as well); and the book and film *The Silence of the Lambs* has generated countless, mostly unfulfillable dreams of careers in forensic profiling.[37]

Finally, some media sources posit the "police chief's effect." This claim holds that *CSI* has educated criminals on how to avoid detection. Examples of the supposed police chief's effect include wearing gloves and dousing crime scenes with bleach.[38]

It is important to emphasize that, of these six effects, only three of them—the strong prosecutor's effect, the defendant's

TABLE 1. THE MANY EFFECTS OF CSI: TYPOLOGY OF CSI EFFECTS FOUND IN MEDIA ACCOUNTS

EFFECT NAME	EFFECT ON	DESCRIPTION
Strong prosecutor's effect	Jurors	Acquit in cases in which they would have convicted had *CSI* never existed
Weak prosecutor's effect	Prosecutors	Compensate for absence/weakness of forensic evidence
Defendant's effect	Jurors	Afford greater credibility to forensic expert witnesses
Producer's effect	Jurors	Know more science
Educator's effect	Students	Attraction to careers in forensic science
Police chief's effect	Criminals	Adopt countermeasures to prevent detection through forensic evidence

28. *Id.*
29. *Id.*
30. Roane et al., *supra* note 13.
31. Max M. Houck, *CSI: Reality*, SCI. AM., July 26, 2006, at 84, 85; Stefan Lovgren, *'CSI' Science Eluding Real-Life Crime Labs, Study Finds*, NAT'L GEOGRAPHIC NEWS, Aug. 8, 2005, *available at* http://news.nationalgeographic.com/news/2005/08/0808_050808_forensics.html
32. KATHERINE RAMSLAND, THE C.S.I. EFFECT (2006).
33. Cole & Dioso-Villa, *supra* note 26. The discussion in this Section draws heavily from that work.
34. Negative evidence refers to the notion of presenting testimonial evidence explaining the absence of physical evidence when the jury might construe that absence as significant. For example, the prosecution might call a forensic technician to testify that the crime scene was dusted for fingerprints but none were found to preclude the defense from insinuating that the police were too lazy or too focused on the defendant to search for fingerprints.
35. *See* Cynthia A. Hoffner et al., *TV Characters at Work: Television's Role in the Occupational Aspirations of Economically Disadvantaged Youths*, 33 J. CAREER DEV. 3, 15 (2006).
36. *See, e.g.*, Michael M. O'Connor, *The Role of the Television Drama* ER *in Medical Student Life: Entertainment or Socialization?*, 280 J. AM. MED. ASS'N 854, 854 (1998).
37. *See, e.g.*, John Randolph Fuller, *So You Want to Be a Serial-Murderer Profiler . . .* , CHRON. HIGHER EDUC., Dec. 7, 2001, at B5.
38. *See generally* Barbara Prainsack & Martin Kitzberger, *DNA Behind Bars: Other Ways of Knowing Forensic DNA Technologies,* 39 SOC. STUDIES OF SCI. 51 (2009). (Discussion of convicts' perceptions of the strength of DNA evidence).

effect, and the police chief's effect—would constitute serious problems for society. If jurors are acquitting defendants that they would have convicted had the television program *CSI* never existed, this would constitute a serious challenge for the legal system. Such acquittals could, in some sense, be construed as wrongful acquittals. Likewise, if television programming is bolstering the credibility of government witnesses (the defendant's effect), wrongful convictions (in the broadest sense of the term) could result. Either of these effects, if true, would raise serious doubts about the integrity of the jury system that forms the foundation of American criminal justice. If juries are so sensitive to irrelevant influences that the current primetime television schedule has a significant impact on their verdicts, can we really sustain the dogged faith in the jury that remains such a cherished principle of American criminal justice? Finally, the police chief's effect would generate perhaps the greatest material harm. If true, the police chief's effect could mean that *CSI* is both increasing crime and decreasing detection of those crimes. However, it should be noted that the police chief's effect is, strictly speaking, a criminological matter not a legal one. If it were occurring, it would probably be detected and addressed by police, not judges.

The other three effects, on the other hand, would not seem to constitute genuine problems for society. For the weak prosecutor's effect, it would seem to comprise only a minor harm if prosecutors feel compelled to change their voir dire questioning to include asking jurors about their television-viewing habits. Prosecutors in cases with little or no forensic evidence might use peremptory challenges to strike heavy *CSI* viewers from the jury based on the supposition that such jurors would require forensic evidence to convict. Likewise, defense attorneys might strike heavy *CSI* viewers in cases that rest heavily on forensic evidence based on the supposition that such jurors would be more likely to afford great credibility to the prosecution's forensic expert witnesses. As discussed in the next Section, neither of these suppositions is necessarily correct. Even so, litigants deploying their peremptory challenges in this manner would not seem to pose a significant legal problem. Similarly, prosecutors adopting the practice of explaining the absence of forensic evidence at trial would not seem to undermine the legal system's ability to deliver justice. Although it is true that the ordering of unnecessary forensic tests could constitute a drain on resources and add to backlogs at forensic labs, this, again, is not, strictly speaking, a problem to be solved by the legal system. The producer's effect is posited as a positive effect, provided that the educational aspects gleaned from the show are not wholly unrealistic or inaccurate. So, too, might the educator's effect be considered favorable if it increases the quantity—and thus perhaps indirectly the quality—of applicant pools to forensic science degree programs.[39] There would seem to be few negative repercussions from the educator's effect beyond the disappointment of some young people when they learn that forensic science is neither as exciting nor as glamorous nor as easy as its depiction on television.

Such acquittals could, in some sense, be construed as wrongful acquittals.

In our earlier work, we cautioned that it was necessary to be vigilant against what we called "hypothesis swapping," in which evidence supporting one supposed effect was used to support claims about the existence of a different effect.[40] In particular, it is not uncommon to see evidence of the weak prosecutor's effect advanced in support of claims that the strong prosecutor's effect is occurring.[41] For example, Maricopa County Attorney Andrew Thomas released a study claiming that jurors are reaching "conclusions contrary to the interests of justice" because of "a significant *CSI* influence."[42] But, in fact, the study concedes that "verdicts have not yet noticeably changed from guilty to not guilty."[43] Instead, the study has merely found the weak prosecutor's effect: "[P]rosecutors have had to take more and more preemptive steps to divert juries from reliance on television-style expectations."[44] Thus, evidence supporting the weak prosecutor's effect is presented in support of the strong prosecutor's effect.

Judge Donald Shelton has reinterpreted the CSI effect as the "tech effect."[45] He suggests that any apparent changes in juror behavior should not be attributed to television programming but rather to the underlying real technological developments that these programs depict.[46] Forensic science and technology have advanced enormously over the past century. Shelton asserts that the cause of changes in juror behavior is not *CSI* but rather the real-life technological improvements in forensic science.[47]

Shelton's argument raises an important caveat about the CSI effect. If we are to take seriously the notion of a CSI effect, it must be carefully disentangled from what Judge Shelton et al. call the "tech effect," the effect of changes in the actual capabilities of forensic science. For example, if, as posited by proponents of a CSI effect, we do find that jurors' expectations for forensic evidence have increased, we would have to assume that this increase is caused by at least two factors. One factor would

39. It should be noted that many forensic scientists feel that aspiring forensic scientists are not well served by forensic degree programs and would be better served by mainstream science programs. *See, e.g.*, KEITH INMAN & NORAH RUDIN, PRINCIPLES AND PRACTICE OF CRIMINALISTICS: THE PROFESSION OF FORENSIC SCIENCE 302 (2001).
40. Cole & Dioso-Villa., *supra* note 26, at 453.
41. *See, e.g.*, Enric Volante & Kim Smith, *"CSI Effect" Impacts Justice in Tucson*, ARIZ. DAILY STAR, May 8, 2005; CBS4 DENV., *supra* note 15.
42. CSI: MARICOPA COUNTY, *supra* note 21.
43. Andrew P. Thomas, *The* CSI *Effect: Fact or Fiction*, 115 YALE L.J. POCKET PART 70, 71-72 (2006) (*available at* http://www.thepocketpart.org/2006/02/thomas.html); *see also* CSI: MARICOPA COUNTY, *supra* note 21, at 5.
44. Thomas, *supra* note 43, at 72; *see also* CSI: MARICOPA COUNTY, *supra* note 21.
45. Shelton et al., *Juror Expectations,* supra note 5.
46. *Id.* at 362-65.
47. *Id.*

[A]ctual evidence of the various effects is difficult to come by.

be jurors' generally *accurate* perceptions of actual increases in the capabilities of forensic science. The other factor would be jurors' *inaccurate* perceptions of the capabilities of forensic science as imparted by *CSI* and similar television programming. Surely, for example, we would not insist that jurors' expectations for forensic evidence should remain completely static. Their expectations *should* be different today than they were, say, a century ago. In the intervening years, numerous forensic technologies have been developed; we would not expect jurors' commonsensical expectations for forensic evidence to ignore these developments.

Our point is that the baseline against which the CSI effect should be measured is not a static baseline with no change in jurors' expectations for forensic evidence. Presumably, jurors' expectations should, appropriately, increase over time, in response to actual advances in forensic technology. The CSI effect, if there is one, would have to refer to a marginal increase in juror expectations that is *excessive of* whatever increase in expectations we should reasonably anticipate, given the technological developments that have actually occurred. What this means is that the tech effect, as Shelton et al. characterize it, is *not* a societal problem. It represents an appropriate increase in juror expectations in response to actual increases in forensic technological capacity. Only the supposed strong prosecutor's effect of wrongful acquittals would represent a genuine problem for the legal system.

III. IS THE "CSI EFFECT" REAL?

Although the media coverage portrays the CSI effect as a well-documented phenomenon, actual evidence of the various effects is difficult to come by.[48] Media accounts rely largely on anecdotes and conclusory statements by various criminal justice system actors. Little reference is made to empirical data, and when such references are made, they usually note the absence of such data.[49] A review of the socio-legal literature reveals a rather different picture. Most legal scholars characterize claims of the most common CSI effect—the strong prosecutor's effect which would lead to wrongful acquittals—as speculative, and many suggest that the defendant's effect is equally plausible, even if mentioned less often by the media.[50] In this Section, we review the various forms of evidence that have been mustered in support of claims that there is a CSI effect, and we present some data on jury acquittal rates from state criminal trials that indicate no significant change in acquittal rates in response to *CSI*.

A. Anecdotes

Media coverage of the CSI effect relies heavily on anecdotes. Perhaps the highest profile anecdote is the acquittal of *Baretta* television star Robert Blake from charges of murdering his wife, in which District Attorney Steve Cooley called the jury "incredibly stupid."[51] The prosecution provided evidence of motive and opportunity, but forensic evidence was lacking. In particular, Blake tested negative for gunshot residue, which was inconsistent with the theory that he fired the weapon that killed his wife.[52] We have suggested elsewhere that the Blake acquittal may be as indicative of a "celebrity defendant effect" as it is of a CSI effect.[53] However, numerous other lower-profile anecdotes abound—cases in which juries supposedly acquitted based on the lack of forensic evidence despite the non-forensic evidence presented at trial. In one sexual assault case, despite incriminating DNA evidence, the jury supposedly acquitted because of the failure to test a soil sample from the victim's cervix.[54] In another, a juror supposedly wanted a lawn tested for fingerprints.[55] Such media portrayals present anecdotal evidence based on journalists' interviews with prosecutors and jurors who claimed that the acquittals were in fact due to jurors' increased expectation of forensic science evidence and techniques based on the television depictions in forensic programs such as *CSI*.[56] It is possible that the jury had good reasons for acquitting. For example, in reference to the Blake case jurors, Professor Laurie Levenson remarked, "[i]t was a reasonable-doubt case, and disagreeing with [Mr. Cooley, the District Attorney,] doesn't make them stupid."[57]

B. Surveys of Legal Actors

The second major form of evidence cited in support of the CSI effect is opinion surveys of legal actors: prosecutors, defense attorneys, and trial judges. These surveys focused on the perceived impact of forensic programs on jury verdicts, pretrial preparation, and trial strategy. Survey results generally indicate that, according to legal actors, the CSI effect is real and has had considerable impact on the carrying out of criminal trials.[58]

However, these surveys provide very little supporting evidence for the strong prosecutor's effect, which people typi-

48. *See, e.g.*, Cole & Dioso-Villa, *supra* note 26; Tyler, *supra* note 23.
49. *See, e.g.*, Roane et al., *supra* note 13; Lovgren, *supra* note 31.
50. *See, e.g.*, Podlas, *supra* note 23; Tyler, *supra* note 23.
51. Julie Keller, *D.A.: Blake Jury "Incredibly Stupid,"* E Online (Mar. 24, 2005). http://www3.eonline.com/uberblog/b49519_da_blake_jury_incredibly_stupid.html
52. Houck, *supra* note 31, at 86.
53. Cole & Dioso-Villa, *supra* note 26, at 455.
54. *See* Andy Kravetz, *"CSI" Making Impact in Courts*, PEORIA J. STAR, Sept. 4, 2005.
55. *See* Art Aisner, *"CSI Effect" Put under the Scope*, ANN ARBOR NEWS, May 18, 2007. at A1.
56. *See, e.g.*, Klein, *supra* note 18.
57. Keller, *supra* note 51.
58. *See* Michael J. Watkins, *Forensics in the Media: Have Attorneys Reacted to the Growing Popularity of Forensic Crime Dramas?* (2004) (Thesis, Florida State University); CSI: MARICOPA COUNTY, supra note 21; Thomas, *supra* note 43; Monica L.P. Robbers, *Blinded by Science: The Social Construction of Reality in Forensic Television Shows and its Effect on Criminal Jury Trials,* 19 CRIM. JUST. POL'Y REV. 84 (2008). Dennis J. Stevens, *Forensic Science, Wrongful Convictions, and American Prosecutor Discretion,* 47 HOW. J. CRIM. JUST. 31 (2008).

cally think of when they think of the CSI effect. Many of the questions on these surveys focus on effects on legal actors' behavior, not jurors' behavior. Moreover, even when these surveys do seek to measure juror behavior, they do so indirectly. Rather than examining jurors about whether they were influenced by *CSI,* these surveys ask legal actors whether they think jurors were influenced by *CSI.* Thus, these surveys measure not whether jurors were influenced by *CSI,* but whether legal actors perceive jurors to have been influenced by *CSI*. In some cases, the legal actors claim to have spoken with the jurors; in others, they offer opinions about jury behavior without having spoken to the jurors. In either scenario, this makes for a poor measure of juror behavior, not merely because it is indirect, but also because legal actors are hardly unbiased perceivers of jurors' behavior and motivations.[59] Asking a prosecutor who has just completed a trial whether a jury acquittal was caused by the CSI effect, rather than by, say, insufficiency of the evidence, is clearly an unsatisfactory way of measuring whether the jurors were indeed influenced by *CSI*. Thus, in order to measure the strong prosecutor's effect, it would be far more preferable to survey jurors directly.

C. Juror Surveys

In order to determine and measure whether there is a CSI effect, several studies surveyed jurors or potential jurors. In studies of this type, jury decision making can be compared between groups who watch *CSI* (and other forensic television programs) with those who do not.

Kimberlianne Podlas attempted to detect the CSI effect by using a rape trial scenario with a consent defense where forensic evidence was neither provided nor necessary.[60] She surveyed 306 college students and asked them to reach a verdict of guilty or not guilty, where the expected or "legally correct" verdict for the case was not guilty. Podlas compared students who regularly watched forensic television programs with those who did not and found that there were no significant differences in their decision-making processes or the handing down of "not guilty" verdicts. The survey results did not indicate any increased expectation of forensic evidence by *CSI* viewers compared to non-*CSI* viewers.

To test the effects of *CSI* on jurors' expectations, Shelton administered a survey to 1027 individuals called to jury duty in a county in southeast Michigan.[61] Respondents were asked about their television viewing habits of crime dramas such as *CSI* and were presented with various scenarios of criminal cases and charges. Respondents were asked what types of evidence they expected to be presented at trial and what verdict they would hand down based on certain types of evidence presented by the prosecution and the defense. The results indicated high expectations for forensic evidence by all subjects, and *CSI* viewers had higher expectations of all types of evidence (forensic and non-forensic) than did non-*CSI* viewers. Any differences found between *CSI* and non-*CSI* viewers were marginally significant and were counter to the strong prosecutor effect. Respondents' increased expectations of scientific evidence did not translate into a requirement for handing down guilty verdicts. For example, *CSI* viewers were more likely than non-*CSI* viewers to find eyewitness testimony valuable when reaching a verdict without any scientific evidence. The authors suggest that the increased expectations of forensic evidence might have little to do with whether or not jurors watch forensic television programs, but instead they may reflect a broader notion in society of an increased awareness about technological advances. Instead of a CSI effect, they posited a general tech effect experienced by everyone.

The survey results did not indicate any increased expectation of forensic evidence by CSI viewers...

Kiara Okita surveyed more than 1200 Canadians about their attitudes toward forensic science.[62] Like Shelton, Okita found that *CSI* viewers and nonviewers did not differ significantly in their perceptions of the accuracy and necessity of forensic science for investigating crimes. Indeed, in some cases nonviewers perceived forensic science to be more accurate than viewers did. However, Okita notes that even those differences between viewers and nonviewers that she did find were so small that they were unlikely to be operationalized, say, by producing different verdicts. As she summarizes:

> Regardless of *CSI* viewership, respondents' [sic] appear to consider forensic science, in general, to be somewhere between accurate or usually accurate, and between somewhat necessary and necessary in determining criminal guilt. Therefore again, contrary to the assertions of CSI effect claimants, respondents do not appear to perceive forensic science as completely accurate and always necessary in determining criminal guilt.[63]

Finally, in a series of studies, Steven Smith found evidence of changes in legal professionals' behavior (the weak prosecutor's effect), and found evidence suggestive of the defendant's effect.[64] But they found little evidence supporting the strong prosecutor's effect.

D. Psychological Experiments

Another approach to measuring the *CSI* effect is to conduct simulations of jury deliberations using mock jurors, usually

59. *See* Cole & Dioso-Villa, *supra* note 26; Tyler, *supra* note 23).(speculating that the CSI effect describes prosecutors' attempts to understand jury behavior).
60. *See* Podlas, *supra* note 23, at 455-61.
61. *See* Shelton et al., *Juror Expectations, supra* note 5, at 332-39.
62. *See* Okita, *supra* note 25.
63. *Id.* at 103.
64. *See* Steven M. Smith et al., Exploring the CSI Effect: Is it Real?, If so, What is it? Address at North American Correctional and Criminal Justice Psychology Conference, *in* Proceedings of the North American Correctional & Criminal Justice Psychology Conference, 2008, at 81, 83.

CSI viewers perceived themselves as having a better understanding of forensic scientists...

college students. Although college student populations are not representative of actual jury pools, jury simulations allow researchers to conduct controlled experiments. Kimberlianne Podlas's second study included 538 mock jurors who deliberated in small groups about two crime scenarios where forensic evidence was neither necessary, nor referenced.[65] Podlas tested for the strong prosecutor's effect as measured by not guilty verdicts or wrongful acquittals for each scenario. She found no indication that *CSI* viewing jurors acquitted in cases that warranted convictions, nor did she find that *CSI* viewers relied on forensic evidence to a greater degree than their non-*CSI* viewing counterparts.

While previous studies examined the strong prosecutor's effect of potential jurors acquitting defendants due to their increased expectation of forensic science, Schweitzer and Saks tested both the strong prosecutor's effect and the defendant's effect—that potential jurors who watch *CSI* have exaggerated faith in the capabilities of forensic science and give this evidence more weight than it may deserve.[66] Their sample included 48 college students who were asked to review a transcript of a mock criminal trial where the key piece of inculpatory evidence was a hair left at the crime scene. They included testimony by a forensic scientist who performed the microscopic hair analysis that identified the defendant, which overstated the probative value of the evidence—something that is apparently not uncommon for hair evidence.[67] Subjects were asked about their television viewing habits and their perceptions about the case and forensic evidence presented. *CSI* viewers perceived themselves as having a better understanding of forensic scientists and their techniques than non-*CSI* viewers, and they were more critical of the forensic evidence presented in the transcript. Schweitzer and Saks interpreted this as indirect evidence of an increased expectation of high-tech forensic science perhaps consistent with *CSI*'s depictions of forensic techniques and a tendency to find less high-tech or glamorous techniques less convincing. Similarly, in a study of 140 college students, Jenkins found *CSI* viewers more sensitive to possible flaws in a forensic assay that was discussed in a mock trial transcript.[68]

E. Acquittal Rate Data

Even if surveys and jury simulations did provide evidence for the strong prosecutor's effect, one would presumably want to look for changes in the rate of jury acquittals in American criminal trials before concluding that *CSI* is influencing jury verdicts. The strong prosecutor's effect holds that jurors are acquitting in cases in which they would have convicted had the television program *CSI* never existed. If this effect is occurring, therefore, it would be expected to manifest itself through an increase in jury acquittals following the advent of the program. In earlier work, we examined data on the jury acquittal rate in federal courts, and we found no discernable increase in acquittal rates following the advent of *CSI*.[69] In fact, if anything, there appeared to be a decrease in the acquittal rate after *CSI*. Were this decrease to be significant it would support the defendant's effect, the claim that *CSI* actually benefits prosecutors. Recall that in some legal scholars' view this effect is equally theoretically plausible.[70] Loeffler supported this finding, determining that there was no evidence of an increase in acquittals after examining the acquittal rate of four large states.[71] Looking at Canadian data, Benoît Dupont also found no discernable increase in acquittals that was attributable to *CSI*.[72] Although overall Canadian acquittals did rise after 2000, Dupont notes that acquittals had been steadily rising for a long time before 2000, and he concludes that *CSI* does not appear to have had an influence on this trend.

We sought to carry this project forward by gathering acquittal rate data from all U.S. jurisdictions. Over the course of six months, we conducted Internet searches of state administrative offices of courts' websites and follow up contacts via email and phone with state court administrators. We surveyed all fifty states to determine whether suitable acquittal rate data was available. We were able to obtain acquittal rate data on felony jury trials from eleven states.[73] However, the states varied in terms of how long they had been compiling dispositional data from criminal jury trials. They ranged from Florida, which has such data from as far back as 1986, to Kentucky, which began compiling data in 2006. There were only eight states for which we were able to ascertain acquittal rates both before and after the advent of *CSI* in 2000: California, Florida, Hawaii, Illinois, New York, North Carolina, Texas, and Vermont.

We compiled acquittal rates for all jury verdicts from the felony trial courts of these eight states and the federal district

65. *See* Kimberlianne Podlas, *The "CSI Effect" and Other Forensic Fictions,* 27 LOY. L.A. ENT. L. REV. 87 (2006-2007).
66. *See* N.J. Schweitzer & Michael J. Saks, *The CSI Effect: Popular Fiction about Forensic Science Affects the Public's Expectations about Real Forensic Science,* 47 JURIMETRICS J. 357 (2007).
67. *See* Margaret A. Berger, *The Impact of DNA Exonerations on the Criminal Justice System*, 34 J.L. MED. & ETHICS 320, 322 (2006).
68. *See* Gwen Jenkins et al., The *CSI Effect*: Mock Jurors' Sensitivity to the Reliability of Forensic Evidence Address at Annual Meeting of the American Psychology-Law Society, Jacksonville, Fla. (Mar. 5-8, 2008).
69. Cole & Dioso-Villa, *supra* note 26, at 462.
70. *See, e.g.*, Tyler, *supra* note 23, at 1084; Podlas, *supra* note 23, at 461
71. Loeffler, *supra* note 24. (The states were New York, Texas, Illinois, and California.)
72. Benoît Dupont, The CSI Effect: Myths and Reality, Address at 29th annual conference of the Canadian Identification Society (2006).
73. These eleven states included California, Florida, Hawaii, Illinois, Kentucky, Missouri, New York, North Carolina, South Dakota, Texas, and Vermont.

courts.[74] In most cases, these were restricted to felony trials, although the types of crimes were not designated in this data. In one case, the acquittal rates include a small number of misdemeanors because the felony trial courts (the California Superior Courts) adjudicate a small number of misdemeanors as well as felonies.[75] Although data on jury verdicts in misdemeanor trials were available for a few states (Texas, Florida, and Vermont), we opted not to include this data in our analysis because of the strong possibility that misdemeanor jury trials differ from felony jury trials.

We were able to obtain data reporting the outcomes (conviction or acquittal) for all felony jury trials (plus a small number of serious misdemeanor trials from California) that went to verdict for the states. We found that acquittal rates are fairly stable over time although, not surprisingly, they fluctuate far more in the two smallest jurisdictions. Indeed, the data show a strong main effect of jurisdiction on acquittal rates. In other words, each jurisdiction's acquittal rate appears to be quite stable over time, and jurisdiction appears to have a far greater influence on the probability of acquittal than does year. A defendant would be better off being tried in Florida than in California both before and after the advent of *CSI*, and, even if there is a CSI effect, it would appear to be a minor issue compared to the influence of jurisdiction.

Although there is no reason to expect that any CSI effect would be felt differentially in different states, the various states do not follow a wholly consistent pattern. Overall, there does appear to be a slight rise in acquittals in 2001 and 2002. Interpreting this small rise as the strong prosecutor's effect, however, raises several concerns. First, after 2002, the acquittal rate drops back to 1998-2000 levels, suggesting that even if there had been a strong prosecutor's effect in 2001-2002, it was short-lived (or prosecutors compensated for it and stopped bringing susceptible cases to trial). Second, the acquittal rate was already rising before the advent of *CSI*. The acquittal rates of 2001-2002 might simply be extensions of this trend, rather than reactions to *CSI*. Third, the aggregate acquittal rate in 1996 was as high as the post-*CSI* acquittal rates of 2001-2002. It may be that it is the 1997 drop in acquittals that requires explanation, rather than increase that followed it. At the same time, the trend toward a *drop* in acquittals that we noted earlier in the federal courts appears even more pronounced now that we have data for two additional years. Whereas in our prior study we found a drop to an 11% federal acquittal rate in 2005, we now see that the acquittal rate has remained at this historically low rate for three consecutive years.

[J]urisdiction appears to have a far greater influence on the probability of acquittal than does year.

In short, the acquittal rate data would seem to offer only equivocal support for only a very small and short-lived strong prosecutor's effect. Can we conclude anything more definitive from this data? How to deal with time-series data of this sort is not obvious. For instance, it is not clear whether the pre-*CSI* acquittal rate should be treated as the acquittal rate for 2000, the year immediately preceding the advent of the program, or the aggregate acquittal rate of a greater range of years, such as 1997-2000. Similarly, it is not clear how best to account for temporal trends in the acquittal rate that preceded the advent of *CSI*. We were not able to find any studies that attempt to model changes in jury verdicts in response to a historical event. Without any such study in hand upon which to model our analysis, we conducted two analyses.

In the first analysis, we treated the acquittal rate of each jurisdiction as an observation. This gave us a total of 132 observations drawn from nine jurisdictions between 1986 and 2008. Since *CSI* began airing in 2000, if *CSI* viewership had an effect on jury verdicts, we would expect a change in acquittal rates as early as fiscal year 2001. We also looked at differences in acquittal rates in the following three years after the first airing of *CSI* to account for the possibility of a lag effect in which *CSI* did not have an immediate impact but did have an impact after some years of media saturation. Indeed, one might expect

74. The sources of the data are: BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS ONLINE, *available at* http://www.albany.edu/sourcebook; CIR. COURTS OF ILL., CASELOAD AND STATISTICAL RECORDS, *available at* http://www.state.il.us/COURT/SupremeCourt/AnnualReport/2006/Stat/caseload.pdf; FLA. OFFICE OF THE STATE COURTS ADM'R, FLORIDA'S TRIAL COURTS STATISTICAL REFERENCE GUIDE, *available at* http://www.flcourts.org/gen_public/stats/ reference_guide.shtml; JUDICIAL COUNCIL OF CAL., ANNUAL DATA REFERENCE FOR 1994-1995, *available at* http://www.courtinfo.ca.gov/reference/ 3_stats.htm; JUDICIAL COUNCIL OF CAL., COURT STATISTICS REPORTS, STATEWIDE CASELOAD TRENDS, *available at* http://www.courtinfo. ca.gov/reference/ 3_stats.htm; N.C. JUDICIAL BRANCH, ADMIN. OFFICE OF THE COURTS, CASELOAD INVENTORY BY COUNTY, SUPERIOR COURT CRIMINAL, DISPOSITION ACTIVITY, STATEWIDE SUMMARY (courtesy of Mr. Patrick Tamer, Statistical Programmer Analyst, Research and Planning Div., N.C. Admin. Office of the Courts); OFFICE OF CT. ADM'R, ANNUAL STATISTICAL REPORT FOR THE TEXAS JUDICIARY, *available at* http://www.courts.state.tx.us/pubs/annual-reports.asp; STATE OF HAW., JUDICIARY, OFFICE OF THE ADMIN. DIR., STATEWIDE CIR. CT. CRIM. (on file with STAN. L. REV.); STATE OF N.Y., REPORT OF THE CHIEF ADMINISTRATOR OF THE COURTS, *available at* http://www.courts.state.ny.us/reports/annual; STATE OF VERMONT SUP. CT., JUDICIAL STATISTICS (2000) (on file with STAN. L. REV.); STATE OF VT. SUP. CT., JUDICIAL STATISTICS (1999) (on file with Stan. L. Rev.); STATE OF VT. SUP. CT., JUDICIAL STATISTICS (1998) (on file with the Stan. L. Rev.); VT. JUDICIARY, ANNUAL STATISTICS, DIST. CT., *available at* http://www.vermontjudiciary.org/Statistics/default.aspx

75. The California data does not allow the removal of misdemeanors because, although convictions are broken out into felonies and misdemeanors, acquittals are aggregated. We do not feel that the inclusion of a small number of California misdemeanors in the felony data is likely to substantially distort our findings. To give some idea of what we mean by a "small number" of misdemeanors: in 2007, misdemeanors accounted for 4.5% of all convictions recorded by the California Superior Courts. *See* JUDICIAL COUNCIL OF CAL., COURT STATISTICS REPORTS, STATEWIDE CASELOAD TRENDS (2008), *available at* http://www.courtinfo.ca. gov/reference/documents/csr2008.pdf

One obvious possibility is that [the CSI effect] is nothing more than a media phenomenon.

that the *CSI* effect would be felt after a large number of aggregate exposures to *CSI* and similar programs. Linear regressions of acquittal rates before and after 2000, after the first airing of *CSI*, found no statistically significant difference.[76] When we tested before and after the years 2001, 2002 and 2003, we also found no statistically significant difference in acquittal rates before and after any of these years. These results suggest that the changes in acquittal rates following the introduction of *CSI* are very likely the result of chance, and, certainly, the possibility that they are due to chance cannot be ruled out.

One disadvantage of Analysis 1 is that it treats each state's annual acquittal rate as a single observation. But such observations refer to a great many more trials in the case of California than in the case of Vermont. Analysis 2 overcomes that disadvantage by treating each trial that went to a jury verdict as an observation. In other words, we treated our data as if it was a random sample of American jury verdicts.[77] States were irrelevant in this analysis, except as a means of obtaining a sample of American jury verdicts. We found a statistically significant increase in acquittal rates from the years pre-*CSI* to post-2001 and post-2002, but not post-2003. As discussed above, there are a number of plausible explanations for this increase in addition to a two-year CSI effect. One is that this increase in acquittal rates post-*CSI* may be attributed to the general trend of rising acquittal rates beginning in 1997 and may not be attributable to any CSI effect. Indeed, we also found a statistically significant increase in acquittals between 1997-1999 and 2000, the year *before CSI* went on the air. Similarly, if we compared just 2000, the one year prior to *CSI*, to the post-*CSI* years, there was no longer a significant increase in acquittal rates; and in the case of one comparison, there was a statistically significant *decrease* in the proportion of acquittals.

Another possibility is that two or more different CSI effects may be canceling each other out. For instance, the strong prosecutor's effect and the defendant's effect might both be occurring and canceling one another out, one driving acquittals up, the other driving them down. Or, the strong prosecutor's effect may be occurring, but prosecutors may be compensating by not bringing the affected cases to trial, by effectively screening out jurors affected by it in voir dire, or by effectively explaining the absence or weakness of forensic evidence. Under such a scenario, the CSI effect would be occurring, but it would not be detected in acquittal rates. In a sense, the strong prosecutor's effect would be canceled by the weak prosecutor's effect. Or, unknown other historical changes for which we have not accounted may have affected the acquittal rate during the period we analyzed and may have counteracted the CSI effect. For example, the September 11, 2001 attack on the World Trade Center and Pentagon comes to mind as an event that falls within the period of analysis that might have conceivably had an impact on acquittal rates. Similarly, a major legal change—such as a landmark Supreme Court ruling on evidence law—might shift acquittal rates, although we are not aware of such a decision during the relevant period. In sum, given the equivocal nature of the data and the relatively small changes in acquittal rates, existing acquittal rate data would not seem to warrant panic about the existence of a CSI effect.

IV. ALTERNATE EXPLANATIONS

In short, there is very little evidence at this time that there is any CSI effect. Why then does the problem receive so much media attention that treats the phenomenon as a serious problem for the judicial system? One obvious possibility is that it is nothing more than a media phenomenon. Sociologists have long noted the existence of "media panics," in which the media exaggerates the danger of some supposed social problems.[78] In the case of the CSI effect, such an interpretation is particularly interesting because it is the media itself that generates the social phenomenon that is problematized.

Another obvious interpretation is that the CSI effect amounts to "sour grapes" by prosecutors. As the acquittal data shows, prosecutors are not accustomed to losing jury trials. To a prosecutor surprised, or just disappointed, by an acquittal, the CSI effect presents a ready, appealing explanation. The Thomas study smacks of this notion. What prosecutor who lost a conviction would not avail herself of the CSI effect as an explanation? Cooley's response to the Blake acquittal also evokes the "sour grapes" hypothesis. Professor Levenson remarked, "[i]t was a reasonable-doubt case, and disagreeing with Mr. Cooley doesn't make [the jury] stupid."[79] Professor Scheck argued that the Blake acquittal reflected an absence of evidence, not the CSI effect.[80] Ms. Nethercott has suggested that what prosecutors call the CSI effect might be viewed simply as punishment for failure to test relevant evidence.[81] At least one prosecutor, however, has denied the "sour grapes" hypothesis.[82]

76. For further details on these analyses, *see* Simon A. Cole & Rachel Dioso-Villa, *Investigating the "CSI Effect" Effect: Media and Litigation Crisis in Criminal Law*, 61 STAN. L. REV. 1335, 1359 (2009).
77. Strictly speaking, our sample was not random. It was a convenience sample dictated by which states compile acquittal rate data. Nonetheless, we think it is still appropriate to treat the sample as random because we did not exercise any choice in selecting which states would supply the sample data.
78. *See, e.g.,* STANLEY COHEN, FOLK DEVILS AND MORAL PANICS (1972); ERICH GOODE & NACHMAN BEN-YEHUDA, MORAL PANICS (1994); PHILIP JENKINS, MORAL PANIC: CHANGING CONCEPTS OF THE CHILD MOLESTER IN MODERN AMERICA (1998).
79. Keller, *supra* note 51.
80. Andrew Blankstein & Jean Guccione, *"CSI" Effect or Just Flimsy Evidence? The Jury Is Out*, L.A. TIMES, March 18, 2005, *available at* http://articles.latimes.com/2005/mar/18/local/me-jurors18
81. Jamie Stockwell, *Defense, Prosecution Play to New "CSI" Savvy*, WASH. POST, May 22, 2005, at A1; Kravetz, *supra* note 54.
82. Kravetz, *supra* note 54.

Professor Tyler favors "media panic" and "sour grapes" explanations:

> The *CSI* effect is probably most important as an example of the way that a broad consensus about the existence of a legally relevant "fact" can emerge out of unsystematic and untested anecdotal observations, in this case by prosecutors and other court observers seeking to explain acquittals that they find puzzling.[83]

A third interpretation is that both prosecutors and defense attorneys, true to the adversary system, are engaging in strategic gamesmanship in order to try to tilt the playing field for the next trial. This puts the weak prosecutor's effect, which claims that it is necessary to address *CSI* in voir dire, in a new light. Voir dire, obviously, has functions other than choosing jurors, such as influencing the jury.[84] Both sides may be seen as trying to influence the jury pool by getting the media to propagate the story that their side is being increasingly disadvantaged by the CSI effect. In other words, litigators seek to benefit from media stories that claim that the other side has been unfairly benefited by television programming. We might call this the "CSI effect *effect*," the effect of media about the CSI effect on criminal trials. If this is indeed the case, it is the prosecutors who have been spectacularly successful. They have turned a television show that may well *enhance* the credibility of forensic evidence into a perceived liability, convinced the media that prosecutors are now unfairly *disadvantaged* in the typical U.S. criminal trial, and turned the *acquittals* into an apparent social problem.

V. WHAT CAN JUDGES DO?

Whether the CSI effect is real or not, however, many actors in the criminal justice system, such as attorneys, expert witnesses, and now, due to media coverage of the CSI effect, even jurors themselves, believe it is real, and, therefore judges are going to have to confront it. State trial court judges have several ways to confront the CSI effect.

1. Voir Dire. There are numerous anecdotal reports of attorneys, or even judges,[85] asking jurors whether they watch *CSI* or other forensic-themed media and of statements in voir dire to the effect of "[y]ou do realize that most of that stuff on 'CSI' is made up?"[86] Should judges permit such questioning? Judge Shelton argues that questioning jurors about television viewing habits is "certainly proper."[87] However, it is well understood that judges must remain vigilant to ensure that probing for bias does not bleed over into improper efforts to influence the jury.[88] Indeed, attorneys acknowledge, and in some cases even openly recommend, using voir dire as "an opportunity to influence jurors"[89] or for "legal" or "factual indoctrination."[90] "Questions" about the CSI effect that are actually statements, like that cited above, would seem to bear a great risk of crossing that line. Judges would probably be well advised to preclude attorneys from making declarative statements during voir dire about the supposed "true" capabilities of forensic science, versus those depicted on *CSI*. First, it would be unduly burdensome to expect the judge to police the verisimilitude of attorneys' representations of the true capabilities of forensic science. Second, such statements would seem to fall outside the goal of detecting prejudice. Indeed, such statements may end up creating bias, rather than detecting it.

State trial court judges have several ways to confront the CSI effect.

It is also well established that attorneys cannot ask jurors to "commit" to a specific verdict or a specific weight to assign a specific type of evidence during voir dire.[91] In some cases, litigants have alleged that attorneys invoking the CSI effect have sought to elicit such commitments. For example, in one case, the following statement was made during voir dire:

> BY THE DISTRICT ATTORNEY (voir dire): . . . [Y]ou know, if you watch TV a lot, you probably get to watch—I don't know how many of you—how many of you watch CSI? Well, raise your hand. See, there's a lot of you. A lot of you. It's a very popular show. My kids love it. All right. They're older and they love that show. They like Law and Order.
>
> But, can everybody tell me that they can separate what they see on TV from what you see in the courtroom? I know that sounds like a silly question, but some people go, oh, well, it was on CSI, so how come they don't do it in every case? All right. And I can tell you how I know, I know CSI and Law and Order are make-believe. If you flip the channel, you may see Scotty beaming somebody

83. Tyler, *supra* note 23, at 1050-1085, 1083. ("The *CSI* effect has become an accepted reality by virtue of its repeated invocation by the media.")
84. *See* Barbara Allen Babcock, *Voir Dire: Preserving "Its Wonderful Power,"* 27 STAN. L. REV. 545, 548 n.15 (1975).
85. Cynthia Di Pasquale, *Beyond the Smoking Gun*, BALTIMORE DAILY REC., Sept. 8, 2006.
86. Robert Yates, Editor's Note, CHI. LAW., May 2008; *see also* Brian Krans, *"CSI" Doesn't Measure Up*, QUAD CITIES ONLINE, Sept. 19, 2005; Melissa Dribben, *Trial by 'CSI'*, PHILA. INQUIRER, Feb. 19, 2006.
87. Shelton, *Forensic Science Challenges, supra* note 5, at 381.
88. Leonard B. Sand & Steven Alan Reiss, *A Report on Seven Experiments Conducted by District Court Judges in the Second Circuit*, 60 N.Y.U. L. REV. 423, 431 (1985) (noting voir dire's "susceptibility to improper uses, especially indoctrinating or building rapport with the jurors by improper questioning").
89. Richard J. Crawford & Daniel W. Patterson, *Exploring and Expanding Voir Dire Boundaries: A Note to Judges and Trial Lawyers*, 20 AM. J. TRIAL ADVOC. 645 (1997); *see also* Marvin Zalman & Olga Tsoudis, *Plucking Weeds from the Garden: Lawyers Speak about Voir Dire*, 51 WAYNE L. REV. 163, 382 (2005).
90. Lisa Lindsey, *quoted in* Edward J. Imwinkelried, *Dealing with Supposed Jury Preconceptions about the Significance of the Lack of Evidence: The Difference between the Perspective of the Policymaker and that of the Advocate*, 27 T.M. COOLEY L. REV. 37 (2010).
91. John T. Bibb, *Voir Dire: What Constitutes an Impermissible Attempt to Commit a Prospective Juror to a Particular Result*, 48 BAYLOR L. REV. 857, 858 (1996).

[O]ne state, Ohio, now includes a direct reference to CSI in its pattern instruction.

else up, and that's on TV. All right? So, can everybody tell me—and, again, this kind of goes to the burden of proof, you know, about what evidence you have—and can everyone tell me that they will listen to the evidence and not speculate because they don't have, say, DNA or they don't have fingerprints and things you may see or hear about on CSI? Can everyone tell me they can do that? Yeah?[92]

In that case, the court ruled that this was not an improper elicitation of a commitment from the jury.[93] Indeed, courts have generally viewed all discussion of *CSI* in voir dire as permissible, and courts have also denied *Batson* challenges in which *CSI* viewing was offered as an explanation for striking jurors.[94]

2. *Negative Evidence*. There are numerous reports of increases in the presentation of so-called "negative evidence" testimony in criminal trials.[95] "Negative evidence" generally refers to evidence introduced that is not directly probative of the defendant's guilt. Rather, negative evidence attempts to explain the absence of forensic evidence in order to rebut or preempt defense arguments that if the defendant were the perpetrator, their state should have been able to find some (or more) forensic evidence linking him to the crime.

It is difficult to see anything of legal concern for judges about the presentation of negative evidence. In most cases, such evidence would not be prejudicial, and it would seem to be the prosecutors' prerogative to present it.

Negative evidence might also raise concerns about judicial economy. The presentation of large amounts of negative evidence at a particular trial might greatly increase the duration, complexity, and expense of the that trial, and these increases might be exacerbated by the recent *Melendez-Diaz* ruling in the U.S. Supreme Court, which may impose significant logistical difficulties by requiring the coordination of in-person appearances by a large number of expert witnesses.[96] Likewise, vast increases in the presentation of negative evidence systemwide could impose significant administrative costs for the judicial system as a whole. Courts have generally given prosecutors wide latitude to present negative evidence.[97] One legal scholar argues that the government's prerogative to present its case as it sees fit probably compels the admittance of negative evidence in most instances.[98] However, a recent psychological study found that, in simulated cases involving so-called "date-rape drugs," the presentation of negative evidence "completely negated" testimony about negative findings from tests for date-rape drugs.[99] This suggests that, in at least this particular scenario, negative evidence may be "too powerful," in that it appears to erase all probative value from evidence that would seem to have at least some probative value.

3. Jury Instructions

One way of minimizing the amount of trial time expended on negative evidence would be to issue a jury instruction. A jury instruction along the lines of the familiar maxim, "the absence of evidence is not evidence of absence" could render much negative evidence unnecessary. Most jurisdictions require courts to use pattern instructions. At least one state, Ohio, now includes a direct reference to *CSI* in its pattern instruction.[100] Although most jurisdictions require judges to use the pattern instructions, some allow trial judges the discretion to craft their own instructions. At least some judges have exercised this discretion to deliver instructions aimed at counteracting the CSI effect. For example, "a believer in the CSI effect," Baltimore City circuit court Judge Wanda Heard "created a new instruction specifically to address scientific evidence. It explains what evidence is and also that the state's burden of proof does not require it."[101]

Should such instructions be encouraged or permitted, or should pattern instructions be revised? Professor Imwinkelried concludes that there is not yet sufficient evidence to warrant a policy decision to create pattern instructions to address the absence of evidence.[102] However, he allows that further research supporting recent findings by Judge Shelton that jurors are particularly sensitive to the absence of DNA evidence in rape cases might warrant a policy of mandatory instructions on the non-necessity of DNA evidence in rape cases.[103] A number of trial courts have given negative evidence instructions testimony over defense objections.[104] Appeals courts have generally not treated the introduction of such evidence as error.[105]

While the issuance of such instructions in jurisdictions that allow judges the discretion to depart from, or add to, pattern instructions would seem to carry very little risk of reversible error, judges might still wish to consider the wisdom of issuing such instructions based on arguments grounded in claims of a

92. Goff v. State, 14 So.3d 625, 652 (Miss. 2009).
93. *Id.* at 653.
94. Shelton, *Forensic Science Challenges*, *supra* note 5, at 382
95. *See, e.g.,* Mark Hansen, *The Uncertain Science of Evidence: Some Testimony from Expert Witnesses in Criminal Trials Is Having Trouble Standing Up to Tougher Scrutiny from the Courts*, 91 A.B.A.J. 48 (July 2005); Richard Willing, *Medium Sends Message to U.S. Court System: "CSI" Effect Has Juries Wanting More Evidence*, CHI. SUN-TIMES, Aug. 15, 2004, at 1.
96. Melendez-Diaz v. Massachusetts, 129 S. Ct. 2527 (U.S. 2009).
97. U.S. v. Fields, 483 F.3d 313, 355 (5th Cir. 2007); State v. Cooke, *supra* note 10; *see also* Gwen Jenkins & Regina Schuller, *The Impact of Negative Forensic Evidence on Mock Jurors' Perceptions of a Trial Drug-Facilitated Sexual Assault*, 31 LAW & HUM. BEHAV. 369, 370 (2007) (Similar case in Canada).
98. Tamara F. Lawson, *Before the Verdict and Beyond the Verdict: The CSI Infection within Modern Criminal Jury Trials,* 41 LOY. U. CHI. L. J. 119, 168 (2009).
99. Jenkins et al., *supra* note 97, at 377.
100. Ohio State Bar Association Jury Instructions, §I.C.3.
101. Pasquale, *supra* note 85.
102. Imwinkelried, *supra* note 90.
103. *Id.;* Shelton et al., *Indirect-Effects Model, supra* note 5, at 21.
104. Shelton, *Forensic Science Challenges*, *supra* note 5, at 370, 388.
105. *Id.* at 388.

supposed CSI effect. The "absence of evidence" problem, after all, predates *CSI*, and so do its remedies. Judges should consider whether the existing reasonable doubt instructions already do enough to address the problem of absence of evidence. Moreover, issuing such instructions may start courts down a slippery slope: by responding to arguments based on perceptions of a CSI effect, judges may be inviting future demands for instructions based on whatever "effects" attorneys perceive from future media treatments of law.

4. Opening and Closing Arguments. The final area in which judges may have to decide whether or not to allow references to *CSI* is in opening and closing arguments. In a number of cases, attorneys have used *CSI* as a foil to seemingly explain the less-than-overwhelming nature of the scientific evidence in their particular case. In one opening argument, a prosecutor advised the jury: "Now, keep in mind when you're listening to the testimony from the witness stand this is not CSI Miami, it's not Law and Order. Nobody involved in this case, no one in this room is an actor. These are real people."[106] In another case, in closing argument, an attorney argued:

> The one issue left in this case is: Was it him? The defense would say, well—and you know they will—there's [sic] no fingerprints of him[.] They didn't print the money. They didn't find his prints on the note. In today's day and age, unfortunately, the police and the State isn't [sic] put to the same test that they wrote 200 years ago in the Constitution [in] which they said the proof must be beyond a reasonable doubt. Unfortunately, the test, of course, of criminal defendants now is, can they meet the TV expectation that they hope folks like you want. Can they meet CSI?
>
> [Objection overruled]
>
> [I]f they don't have fingerprints, he can't be guilty. On TV, they would have found fingerprints. But this isn't TV, this is real life.[107]

Appeals courts have been divided as to whether such statements constitute error. The distinction seems to hinge on whether the claim that there is a "TV standard of proof" is interpreted as belittling or reinforcing the BARD standard.[108]

VI. CONCLUSION

Should judges worry about the CSI effect? While there does not seem to be anything wrong with attorneys reacting to *CSI* within the framework of existing rules and procedures, there does not seem to be a good reason at this time to change existing rules and procedures. Judges should also be vigilant to ensure that invoking *CSI* does not become "cover" for practices that should not be permitted, like improperly biasing or eliciting commitment from the jury. Judges inclined to think *CSI* warrants changes in existing rules and procedures might consider two key points. First, as Judge Shelton argues, *some* raising of juror expectations for forensic science is appropriate given actual, not fictional, technological developments. Second, changing existing rules and procedures in response today's media sets a precedent for similar interventions in response to tomorrow's media. If judges think the jury system is so weak that verdicts can be altered by prime-time television programming, we all have a lot more to worry about than *CSI*.



Simon A. Cole is Associate Professor & Chair of the Department of Criminology, Law and Society at the University of California, Irvine. He received his Ph.D. in Science & Technology Studies from Cornell University. He specializes in the historical and sociological study of the interaction between science, technology, law, and criminal justice. Dr. Cole is the author of Suspect Identities: A History of Fingerprinting and Criminal Identification *(Harvard University Press, 2001) and more than 18 scholarly articles and book chapters about the scientific validity of fingerprint evidence and its use in the courts. His most recent book is* Truth Machine: The Contentious History of DNA Fingerprinting *(University of Chicago Press, 2008, with Michael Lynch, Ruth McNally & Kathleen Jordan). He is a member of the American Judicature Society Commission on Forensic Science and Public Policy, and he is Co-Editor of the journal* Theoretical Criminology.



Rachel Dioso-Villa is an Assistant Professor at the School of Criminology and Criminal Justice at Griffith University. She received her Ph.D in Criminology, Law and Society from the University of California, Irvine and her M.A. in Criminology from the University of Toronto. Her broad research interests include the study of forensic science, law and society. She examines the admissibility of forensic evidence in court, representations of crime and forensic science in the media, jury studies, and miscarriages of justice and wrongful convictions. Dr. Dioso-Villa recently completed a comparative study on the admission of expert evidence in criminal and civil cases in the U.S. She is also working on research in the area of forensic science and its role in wrongful convictions. Dr. Dioso-Villa has received grants and fellowships from the Social Science and Humanities Research Council of Canada, the American Society of Criminology and the Canadian Foundation of University Women. Her work has appeared in the Stanford Law Review, Canadian Journal of Criminology, International Criminal Justice Review, *and the* Wall Street Journal.

106. Mathis v. State, 2006 WL 2434741 (Del) at *4.
107. Boatswain v. State, *supra* note 22, at *1-2.
108. Shelton, *Forensic Science Challenges*, *supra* note 5, at 383; *see also,* United States v. Gentles, 619 F.3d 75 (1st Cir. 2010).