

**Docket No. 22-10312**

---

---

*In the*  
**United States Court of Appeals**  
*for the*  
**Ninth Circuit**

---

UNITED STATES OF AMERICA,

*Plaintiff-Appellee,*

v.

ELIZABETH A. HOLMES,

*Defendant-Appellant.*

---

*Appeal from a Decision of the United States District Court for the Northern District of California,  
No. 5:18-cr-00258-EJD-1 · Honorable Edward J. Davila*

---

---

**AMICUS CURIAE BRIEF ON BEHALF OF  
THE NATIONAL ASSOCIATION OF CRIMINAL DEFENSE  
LAWYERS IN SUPPORT OF APPELLANT AND REVERSAL**

---

---

DANIEL M. SULLIVAN, ESQ.  
BRIAN T. GOLDMAN, ESQ.  
BENJAMIN B. ALLEN, ESQ.  
HOLWELL SHUSTER & GOLDBERG LLP  
425 Lexington Avenue  
New York, New York 10017  
Tel: (646) 837-5151  
dsullivan@hsgllp.com  
bgoldman@hsgllp.com  
ballen@hsgllp.com

*Attorneys for Amicus Curiae,  
The National Association of Criminal Defense Lawyers*

---

---

## CORPORATE DISCLOSURE STATEMENT

Pursuant to [Fed. R. App. P. 26.1](#), *amicus curiae*, the National Association of Criminal Defense Lawyers, certifies that it has no parent corporation and no publicly held corporation owns any of its stocks.

Date: April 24, 2023

*/s/ Brian T. Goldman*

---

Daniel M. Sullivan  
Brian T. Goldman  
Benjamin B. Allen

HOLWELL SHUSTER & GOLDBERG LLP  
425 Lexington Avenue  
New York, New York  
(646) 837-5129  
bgoldman@hsgllp.com

*Attorneys for Amicus Curiae*

## TABLE OF CONTENTS

CORPORATE DISCLOSURE STATEMENT .....	i
TABLE OF AUTHORITIES .....	iii
INTEREST OF <i>AMICUS CURIAE</i> .....	1
STATEMENT .....	2
ARGUMENT .....	3
I. EXPERT SCIENTIFIC EVIDENCE PLAYS AN INCREASINGLY CRUCIAL ROLE IN CRIMINAL CONVICTIONS.....	3
II. THE EXPERT TESTIMONY USED BELOW SKIRTED RULE 16 AND FRE 702 .....	7
A. Rule 16 and FRE 702 Are Designed to Provide Meaningful Checks on Admissible Expert Testimony .....	7
B. Dr. Das’s Testimony Did Not Comply with These Strictures .....	11
1. Delay in Disclosing Dr. Das’s Testimony .....	11
2. Dr. Das Testified as an Expert Witness .....	13
3. Dr. Das Relied on Unverifiable Data .....	15
III. THIS COURT SHOULD REAFFIRM THE PROTECTIONS OF RULE 16 AND FRE 702 .....	17
CONCLUSION.....	20
CERTIFICATE OF COMPLIANCE.....	21
CERTIFICATE OF SERVICE.....	22

## TABLE OF AUTHORITIES

Cases	Page(s)
<i>Ake v. Oklahoma</i> , <a href="#"><u>470 U.S. 68</u></a> (1985).....	4
<i>Barnard v. Henderson</i> , <a href="#"><u>514 F.2d 744</u></a> (5th Cir. 1975).....	10
<i>Daubert v. Merrill Dow Pharmaceuticals, Inc.</i> , <a href="#"><u>509 U.S. 579</u></a> (1993).....	10, 11
<i>Davis v. Alaska</i> , <a href="#"><u>415 U.S. 308</u></a> (1974).....	10
<i>Gen. Elec. Co. v. Joiner</i> , <a href="#"><u>522 U.S. 136</u></a> (1997).....	16
<i>Miller v. State</i> , <a href="#"><u>809 P.2d 1317</u></a> (Okla. Ct. Crim. App. 1991).....	12
<i>Oliver v. State</i> , <a href="#"><u>60 A.3d 1093</u></a> (Del. 2013).....	12
<i>Pyramid Technologies, Inc. v. Hartford Casualty Ins.</i> , <a href="#"><u>752 F.3d 807</u></a> (9th Cir. 2014).....	15
<i>Rodriguez v. Gen. Dynamics Armament &amp; Tech. Prod.</i> , <a href="#"><u>510 F. App'x 675</u></a> (9th Cir. 2013).....	14, 18
<i>State v. Wilson</i> , <a href="#"><u>507 N.E.2d 1109</u></a> (Ohio 1987).....	14
<i>United States v. Afyare</i> , <a href="#"><u>632 F. App'x 272</u></a> (6th Cir. 2016).....	17
<i>United States v. Alvarado</i> , <a href="#"><u>209 F. App'x 685</u></a> (9th Cir. 2006).....	17, 18
<i>United States v. Amaral</i> , <a href="#"><u>488 F.2d 1148</u></a> (9th Cir. 1973).....	3

	<b>Page(s)</b>
<b>Cases—continued:</b>	
<i>United States v. Bighead</i> , <a href="#"><u>128 F.3d 1329</u></a> (9th Cir. 1997).....	10
<i>United States v. Bresil</i> , <a href="#"><u>767 F.3d 124</u></a> (1st Cir. 2014) .....	17
<i>United States v. Buchanan</i> , <a href="#"><u>964 F. Supp. 533</u></a> (D. Mass. 1997) .....	17
<i>United States v. Cerna</i> , <a href="#"><u>2010 WL 2347406</u></a> (N.D. Cal. June 8, 2010).....	3, 12
<i>United States v. Chavez-Lopez</i> , <a href="#"><u>767 F. App'x 431</u></a> (4th Cir. 2019).....	13
<i>United States v. Durham</i> , <a href="#"><u>464 F.3d 976</u></a> (9th Cir. 2006).....	9
<i>United States v. Figueroa-Lopez</i> , <a href="#"><u>125 F.3d 1241</u></a> (9th Cir. 1997).....	2, 8, 13
<i>United States v. Finley</i> , <a href="#"><u>301 F.3d 1000</u></a> (9th Cir. 2002).....	13
<i>United States v. Frazier</i> , <a href="#"><u>387 F.3d 1244</u></a> (11th Cir. 2004).....	4
<i>United States v. Ganier</i> , <a href="#"><u>468 F.3d 920</u></a> (6th Cir. 2006).....	13
<i>United States v. Garcia</i> , <a href="#"><u>730 F. Supp. 2d 1159</u></a> (C.D. Cal. 2010) .....	16, 17
<i>United States v. Halamek</i> , <a href="#"><u>5 F.4th 1081</u></a> (9th Cir. 2021) .....	10
<i>United States v. Holguin</i> , <a href="#"><u>51 F.4th 841</u></a> (9th Cir. 2022) .....	13
<i>United States v. Larson</i> , <a href="#"><u>495 F.3d 1094</u></a> (9th Cir. 2007).....	9

	<b>Page(s)</b>
<b>Cases—continued:</b>	
<i>United States v. Peoples</i> , <a href="#">250 F.3d 630</a> (8th Cir. 2001).....	18
<i>United States v. Soto-Beniguez</i> , <a href="#">356 F.3d 1</a> (1st Cir. 2003) .....	18
<i>United States v. Tsosie</i> , <a href="#">709 F. App'x 447</a> (9th Cir. 2017).....	12, 17
<i>United States v. Valencia-Lopez</i> , <a href="#">971 F.3d 891</a> (9th Cir. 2020).....	18
<i>United States v. W.R. Grace</i> , <a href="#">526 F.3d 499</a> (9th Cir. 2008).....	8, 9
<i>United States v. Wicker</i> , <a href="#">848 F.2d 1059</a> (10th Cir. 1988).....	17
<i>United States v. Yagi</i> , <a href="#">2013 WL 10570994</a> (N.D. Cal. Oct. 17, 2013) .....	3, 12
<i>Wendell v. GlaxoSmithKline LLC</i> , <a href="#">858 F.3d 1227</a> (9th Cir. 2017).....	15
<b>Other Authorities</b>	
ABA, Standards for Criminal Justice: Standards Relating to Discovery and Procedure Before Trial Standard 2.1 (1970) .....	8
Anne Bowen Poulin, <i>Experience-Based Opinion Testimony: Strengthening the Lay Opinion Rule</i> , 39 PEPP. L. REV. 551 (2012) .....	15
Bennett L. Gershman, <i>Misuse of Scientific Evidence By Prosecutors</i> , 28 OKLA. CITY U. L. REV. 17 (2003) .....	5
Brandon L. Garrett & Peter J. Neufeld, <i>Invalid Forensic Science Testimony and Wrongful Convictions</i> , 95 VA. L. REV. 1 (2009).....	6
Erin Murphy, <i>The Mismatch Between Twenty-First-Century Forensic Evidence and Our Antiquated Criminal Justice System</i> , 87 S. CAL. L. REV. 633 (2014).....	4

## Page(s)

**Other Authorities—continued:**

Hon. Donald E. Shelton, <i>Juror Expectations for Scientific Evidence in Criminal Cases: Perceptions and Reality About the “CSI Effect” Myth</i> , 27 T.M. COOLEY L. REV. 1 (2010).....	5
Jean R. Sternlight, <i>Justice in a Brave New World?</i> , 52 CONN. L. REV. 213 (2020).....	4, 5, 6
Joseph L. Peterson <i>et al.</i> , <i>The Uses and Effects of Forensic Science in the Adjudication of Felony Cases</i> , 32 J. FORENSIC SCI. 1730 (1987) .....	3
Michael J. Saks & Jonathan Jay Koehler, <i>The Coming Paradigm Shift in Forensic Identification Science</i> , 309 SCIENCE 892 (2005) .....	6
N. J. Schweitzer & Michael J. Saks, <i>The Gatekeeper Effect: The Impact of Judges’ Admissibility Decisions on the Persuasiveness of Expert Testimony</i> , 15 PSYCH. PUB. POL’Y & L. 1 (2009).....	5
Paul C. Giannelli & Kevin C. McMunigal, <i>Prosecutors, Ethics, and Expert Witnesses</i> , 76 FORDHAM L. REV. 1493 (2007) .....	8
Paul C. Giannelli, <i>Criminal Discovery, Scientific Evidence, and DNA</i> , 44 VAND. L. REV. 791 (1991).....	15
Paul C. Giannelli, <i>Forensic Science</i> , 34 J.L. MED. & ETHICS 310 (2006) .....	3

**Rules**

<a href="#">Fed. R. Crim. P. 16</a> .....	<i>passim</i>
<a href="#">Fed. R. Evid. 701</a> .....	2, 7, 9, 17
<a href="#">Fed. R. Evid. 702</a> .....	<i>passim</i>
<a href="#">Fed. R. Evid. 701</a> advisory comm.’s note to 2000 amend. ....	9
<a href="#">Fed. R. Evid. 702</a> advisory comm.’s note to 2000 amend. ....	5

**Constitution**

<a href="#">U.S. Const. amend. VI</a> .....	9
---	---

## **INTEREST OF *AMICUS CURIAE***

The National Association of Criminal Defense Lawyers is a nonprofit bar association that works on behalf of criminal defense attorneys to ensure justice and due process for those accused of crime or misconduct.

NACDL was founded in 1958. It has a nationwide membership of thousands of members, including private criminal defense lawyers, public defenders, military defense counsel, law professors, and judges. NACDL is the only nationwide professional bar association for public defense and private criminal defense lawyers.

NACDL is dedicated to advancing the proper, efficient, and just administration of criminal justice. Each year, NACDL files amicus briefs in this Court and others in cases that present issues of broad importance to criminal defendants, criminal defense lawyers, and the criminal justice system. The question addressed in this *amicus* brief, involving the protections afforded criminal defendants regarding expert witness testimony and evidence, is such an issue.<sup>1</sup>

---

<sup>1</sup> *Amicus* affirms that no counsel for a party authored this brief in whole or in part, and that no person other than *amicus* and its counsel made a monetary contribution to the preparation or submission of this brief. *Amicus* further represents that all parties consented to the submission of this *amicus* brief.



## STATEMENT

The Federal Rules of Criminal Procedure and of Evidence work together to ensure that a criminal defendant can confront and challenge an expert witness proffered by the prosecution. Rule 16 requires the prosecution to timely disclose the identity of an expert witness, and the basis for that expert’s testimony, sufficiently before trial to permit a criminal defendant to mount a complete defense. And the rules of evidence—in particular, Rules 701 and 702—ensure that an expert’s testimony is based on reliable, verifiable data that can be the subject of rigorous cross-examination.

In this prosecution, the defendant, Elizabeth Holmes, was robbed of the protections of these rules. The government disclosed a lay-turned-expert witness—on the critical question of whether Theranos technology worked—on the eve of trial, years after the Rule 16 deadline had passed. Worse, that expert testimony relied upon data that no longer existed, meaning it was neither reliable nor verifiable, and could not be the subject of meaningful cross-examination or responsive testimony.

This sleight of hand is, regrettably, common. The government has previously “subvert[ed] the requirements” of the federal rules, and “blur[r]ed the distinction between” expert and lay testimony. *United States v.*

*Figueroa-Lopez*, [125 F.3d 1241, 1246](#) (9th Cir. 1997). It also frequently discloses expert witnesses way beyond the deadlines set forth in Rule 16. See *United States v. Yagi*, [2013 WL 10570994](#), at \*16 (N.D. Cal. Oct. 17, 2013); *United States v. Cerna*, [2010 WL 2347406](#), at \*1 (N.D. Cal. June 8, 2010). This appeal is an opportunity to call the government to account for these harmful practices.

## ARGUMENT

### I. EXPERT SCIENTIFIC EVIDENCE PLAYS AN INCREASINGLY CRUCIAL ROLE IN CRIMINAL CONVICTIONS

A. Expert scientific testimony plays a vital role in criminal proceedings. Studies have consistently found that the prosecutor’s presentation of scientific expert testimony can swing a verdict from innocent to guilty. As one study remarked, “one quarter of the citizens who had served on juries which were presented with scientific evidence believed that[,] had such evidence been absent, they would have changed their verdicts—from guilty to not guilty.” Paul C. Giannelli, *Forensic Science*, 34 J.L. MED. & ETHICS 310, 316 (2006) (quoting Joseph L. Peterson et al., *The Uses and Effects of Forensic Science in the Adjudication of Felony Cases*, 32 J. FORENSIC SCI. 1730, 1748 (1987)). This Court recognized as much over fifty years ago.

*United States v. Amaral*, 488 F.2d 1148, 1152 (9th Cir. 1973) (noting the “peculiar risks of expert testimony” because “[s]cientific or expert testimony [has an] aura of special reliability and trustworthiness”).

**B.** Today, highly advanced science and technology are integrated much more into society than ever before. DNA evidence is, of course, well known among the general public and used frequently. But there are other examples. We now regularly use “cameras, geo-tracking, facial recognition software, brain scans, computers,” and many other tools to collect and understand evidence. Jean R. Sternlight, *Justice in A Brave New World?*, 52 CONN. L. REV. 213, 217 (2020); see Erin Murphy, *The Mismatch Between Twenty-First-Century Forensic Evidence and Our Antiquated Criminal Justice System*, 87 S. CAL. L. REV. 633, 636–37 (2014).

Correspondingly, the need for federal courts to act as gatekeepers for expert scientific testimony is even more critical today, as such technological advances make expert evidence more influential on juries than in the past, and more influential even than other forms of evidence. For this reason, courts have recognized that expert testimony creates a unique risk of prejudice as it “may be assigned talismanic significance in the eyes of lay jurors.” *United States v. Frazier*, 387 F.3d 1244, 1263 (11th Cir. 2004); see

also *Ake v. Oklahoma*, 470 U.S. 68, 81 (1985) (“When jurors make this determination about issues that inevitably are complex and foreign, the testimony of [experts] can be crucial.”).

Commentators, too, caution that “when judges allow expert testimony to reach the jury although the evidence is of low quality, they imbue it with undeserved credibility.” N. J. Schweitzer & Michael J. Saks, *The Gatekeeper Effect: The Impact of Judges’ Admissibility Decisions on the Persuasiveness of Expert Testimony*, 15 PSYCH. PUB. POL’Y & L. 1 (2009). It is perhaps out of concern for this effect that the Federal Rules of Evidence advisory committee has advised courts not to use the word “expert” to avoid “put[ting] their stamp of authority” on the testimony. Fed. R. Evid. 702 advisory comm.’s note to 2000 amend.; see Bennett L. Gershman, *Misuse of Scientific Evidence By Prosecutors*, 28 OKLA. CITY U. L. REV. 17, 29–30 (2003) (“The expert, more than any other witness who testifies in a U.S. courtroom, possess the greatest capacity to mislead the jury.”).

At the same time, jurors expect prosecutors to “use the advantages of modern science and technology as tools to meet their burden of proving guilt beyond a reasonable doubt.” Hon. Donald E. Shelton, *Juror Expectations for Scientific Evidence in Criminal Cases: Perceptions and Reality About*

*the “CSI Effect” Myth*, 27 T.M. COOLEY L. REV. 1, 31 (2010); *see also* Sternlight, at 223 (“[J]uries these days tend to crave the supposed certainty of such evidence—what some have called the ‘CSI effect.’”). Thus, the expectations of the average juror today both pressures prosecutors to present scientific evidence and magnifies the impact that evidence has on the jury.

C. Take DNA as an example. Recent data based on exonerations of wrongfully convicted individuals suggest that “erroneous forensic science expert testimony is the second most common contributing factor to wrongful convictions.” *See* Michael J. Saks & Jonathan Jay Koehler, *The Coming Paradigm Shift in Forensic Identification Science*, 309 SCIENCE 892, 892 (2005). The Innocence Project database at Benjamin N. Cardozo School of Law reveals that, in 63% of DNA exoneration cases, the trial evidence contained errors in results obtained by forensic-science expert witnesses—and in 27% of such cases, the testimony of expert witnesses contained seriously misleading assertions. *Id.* Another recent study examining the effects of expert testimony in the cases of people later exonerated found that flawed expert evidence was involved in sixty percent of verified false convictions. *See* Brandon L. Garrett & Peter J. Neufeld, *Invalid Forensic Science Testimony and*

*Wrongful Convictions*, 95 VA. L. REV. 1, 1–2 (2009). And this data only concerns successful exonerations; it likely underestimates the total number of wrongful convictions obtained by means of misleading expert testimony and scientific evidence.

In short, the “growing importance of technical evidence,” Sternlight, at 258, and the concurrent need for experts to help interpret such evidence, has amplified the need for courts to enforce rules and procedures that protect criminal defendants from the abuse or misuse of expert testimony regarding complex data.

## **II. THE EXPERT TESTIMONY USED BELOW SKIRTED RULE 16 AND FRE 702**

### **A. Rule 16 and FRE 702 Are Designed to Provide Meaningful Checks on Admissible Expert Testimony**

The rules of procedure and evidence, among other tools, guide courts in ensuring that expert evidence is used properly. The disclosure requirements of [Federal Rule of Criminal Procedure 16](#), along with the limitations on expert evidence contained in Federal Rules of Evidence 701 and 702, constitute critical aspects of that guidance. Those rules are designed to ensure that a defendant’s due process rights are protected when prosecutors rely on expert evidence, and they work together to achieve that effect through

timely disclosure of expert witnesses and the basis for their testimony (Rule 16) and clear rules as to the proper (and improper) subjects for expert testimony (FRE 701 and 702).

**Rule 16.** Federal Rule of Criminal Procedure 16 requires that the government provide in writing all opinions of an expert witness it intends to present, including the bases for the expert’s opinion, “sufficiently before trial” in order to ensure a defendant’s “fair opportunity” to mount a defense. Fed. R. Crim. P. 16(a)(1)(G). The rule “is intended to minimize surprise that often results from unexpected testimony, . . . and to provide the opponent with a fair opportunity to test the merit of the expert’s testimony through focused cross-examination.” *Figueroa-Lopez*, 125 F.3d at 1246 (internal quotations omitted). The pretrial disclosures called for by Rule 16 are “*mandatory*.” *United States v. W.R. Grace*, 526 F.3d 499, 510 (9th Cir. 2008) (emphasis in original).

They are also critical. “The importance of comprehensive discovery in cases in which scientific proof is offered in evidence cannot be overstated.” Paul C. Giannelli & Kevin C. McMunigal, *Prosecutors, Ethics, and Expert Witnesses*, 76 *FORDHAM L. REV.* 1493, 1507 (2007). As the American Bar Association (ABA) Criminal Justice Standards note, the “need for full and fair

disclosure is especially apparent with respect to scientific proof and the testimony of experts. This sort of evidence is practically impossible for the adversary to test or rebut at trial without an advance opportunity to examine it closely.” *Id.* (quoting ABA, *Standards for Criminal Justice: Standards Relating to Discovery and Procedure Before Trial Standard 2.1*, at 66 (1970)).

Accordingly, as this Court has stated in no uncertain terms, “the government would violate Rule 16 if it were to call expert witnesses who were not timely disclosed.” *W.R. Grace*, [526 F.3d at 516](#).

**Rules 701 and 702.** Federal Rules of Evidence 701 and 702 distinguish between lay and expert testimony. The former must be “predicated upon concrete facts within [the witness’s] own observation and recollection” while the latter can encompass “opinions or conclusions drawn from such facts.” *United States v. Durham*, [464 F.3d 976, 982](#) (9th Cir. 2006) (quotation omitted). To clarify the demarcation between Rules 701 and 702, the Federal Rules advisory committee amended Rule 701 two decades ago to expressly state that lay testimony under Rule 701 may “not [be] based on scientific, technical, or other specialized knowledge.” [Fed. R. Evid. 701\(c\)](#). As the committee explained at the time, the amendment sought to “eliminate the risk



that the reliability requirements set forth in Rule 702 will be evaded through the simple expedient of proffering an expert in lay witness clothing.” Fed. R. Evid. 701 advisory comm.’s note to 2000 amend.

These concerns regarding reliability of expert testimony are not mere formalities—they go to the heart of the accused’s fundamental right to mount a defense and, specifically, to confront the witness against them through cross-examination. *Cf. U.S. Const. amend. VI; United States v. Larson*, 495 F.3d 1094, 1102 (9th Cir. 2007) (Confrontation Clause encompasses “the right of effective cross-examination.” (quoting *Davis v. Alaska*, 415 U.S. 308, 318 (1974))). As Judge Noonan explained in dissent (a dissent ultimately vindicated in part in *United States v. Halamek*, 5 F.4th 1081, 1088 (9th Cir. 2021)), “if the rules of evidence”—including the “demanding criteria” of *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), which permits the trial court to act as a gatekeeper in deciding when expert scientific testimony is admissible—“are relaxed . . . we gravely damage the rights of the accused.” *United States v. Bighead*, 128 F.3d 1329, 1337 (9th Cir. 1997) (Noonan, J. dissenting); *see also Barnard v. Henderson*, 514 F.2d 744, 746 (5th Cir. 1975) (“[F]undamental fairness is violated when a criminal defend-

ant . . . is denied the opportunity to have an expert of his choosing . . . examine a piece of critical evidence whose nature is subject to varying expert opinion.”).

**B. Dr. Das’s Testimony Did Not Comply with These Strictures**

As explained in Ms. Holmes’ brief, the government’s introduction of Dr. Kingshuk Das’s expert testimony flew in the face of these protections. *Amicus* does not repeat those arguments here. *Amicus* merely reiterates the basic procedural facts underlying Dr. Das’s testimony to underscore the extent to which the court below deviated from the rules of procedure and evidence designed to protect criminal defendants’ due process rights.

***1. Delay in Disclosing Dr. Das’s Testimony***

The government made its Rule 16 expert witness disclosures in March 2020. 12-ER-3343. At that time, it disclosed as an expert Stephen Master. Ms. Holmes moved to preclude his testimony and the court ordered a *Daubert* hearing; but the hearing never occurred, and Mr. Master never appeared at trial. 12-ER-3381.

Instead, the government ended up relying on the “expert” testimony of Dr. Das—a former clinical lab director at Ms. Holmes’ company, Theranos. The timing and nature of the disclosure that Dr. Das would *offer* expert testi-

mony is remarkable: in a four-sentence email, five weeks before opening argument, the government notified Ms. Holmes that it may call Dr. Das as an expert. 8-ER-2231. This purported disclosure occurred sixteen months after the government's disclosure of Mr. Masters and otherwise failed to meet the requirements of Rule 16.

What happened here verges on trial by ambush and subverts the basic purpose of Rule 16. The disclosure of the “bases and reasons” for an expert opinion “must be sufficient to allow counsel to frame a *Daubert* motion (or other motion in limine), to prepare for cross-examination, and to allow a possible counterexpert to meet the purport of the case-in-chief testimony.” *Cerna*, 2010 WL 2347406, at \*1. The purposes undergirding Rule 16, particularly with respect to expert testimony, simply cannot be fulfilled by an email weeks before a criminal trial is to begin, informing the defendant that the government *might* elicit certain expert testimony. *See Yagi*, 2013 WL 10570994, at \*16 (precluding expert witness testimony, and explaining, “as a result of the untimely disclosure, the defense has been prejudiced in its ability to evaluate the proffered expert testimony and, if necessary, secure rebuttal witnesses to testify as to the value of a potentially diverse set of

items”); *Oliver v. State*, [60 A.3d 1093, 1099–1100](#) (Del. 2013) (while continuance had been held sufficient where counsel could review previously undisclosed notes of a police officer or journal of a victim, that did not apply to previously undisclosed notes of a forensic expert that needed the interpretation of another expert).

This “failure to properly notice expert testimony” by itself justifies reversal. *See United States v. Tsosie*, [709 F. App’x 447, 450](#) (9th Cir. 2017) (affirming district court’s limitation of scope of testimony because of government’s untimely notice); *see also Miller v. State*, [809 P.2d 1317, 1320](#) (Okla. Ct. Crim. App. 1991) (*inter alia*, “the State’s extreme tardiness in complying with the discovery order, resulted in trial by ambush on a very critical piece of [expert] evidence.”).

## **2. *Dr. Das Testified as an Expert Witness***

To make matters worse, the government funneled Dr. Das’s expert opinions through his purported status as a fact witness. Specifically, the government argued that, although his testimony “may sound scientific to [the court] or others in the courtroom, he was doing the job he was hired to do” and therefore offering lay testimony. 13-ER-3507–08.

But an expert “need only exceed ‘the common knowledge of the average layman’” to be classified as an expert (and not lay) witness. *United States v. Holquin*, [51 F.4th 841, 854](#) (9th Cir. 2022) (quoting *United States v. Finley*, [301 F.3d 1000, 1007](#) (9th Cir. 2002)). As the record here shows, Dr. Das’s testimony exceeded that standard by relying directly upon scientific and technical knowledge well beyond what a lay person would possess. 33-ER-9455–56; see *United States v. Chavez-Lopez*, [767 F. App’x 431, 435](#) (4th Cir. 2019) (“[E]xpert testimony is necessary to describe specialized medical tests but not to describe reading a thermometer.” (citing *United States v. Ganier*, [468 F.3d 920, 926](#) (6th Cir. 2006))).

The fact that Dr. Das was also a percipient witness did not authorize him to offer expert testimony; if it did, the purposes behind the rules governing expert testimony could be easily circumvented. See *Figueroa-Lopez*, [125 F.3d at 1246](#) (“The mere percipience of a witness to the facts on which he wishes to tender an opinion does not trump Rule 702. Otherwise, a layperson witnessing the removal of a bullet from a heart during an autopsy could opine as to the cause of the decedent’s death.”); *Rodriguez v. Gen. Dynamics Armament & Tech. Prod.*, [510 F. App’x 675, 676](#) (9th Cir. 2013) (“[E]ven when the expertise involved is specialized knowledge gained as part of a

witness’s job,” any part of the testimony “based upon scientific, technical, or other specialized knowledge within the scope of Rule 702 is governed by the standards of Rule 702.” (internal quotation omitted)). It can hardly be disputed that Dr. Das offered his opinion based on his expert assessment of certain data—albeit data no longer available—and therefore should have been timely disclosed and properly qualified by the court. *See State v. Wilson*, [507 N.E.2d 1109, 1112](#) (Ohio 1987) (where defense was never informed of expert opinion, court determined that it “reveal[ed] a conscious effort on the part of the prosecution to conduct . . . ‘trial by ambush.’”).

### **3. *Dr. Das Relied on Unverifiable Data***

Dr. Das’s testimony also violated FRE 702 because his analyses relied on undisclosed data. Dr. Das addressed the critical issue in the case—whether Theranos’ core technology, the Edison device, was suitable for patient testing. 8-ER-2228. Yet the government *never shared the data that Dr. Das’s analyses of Theranos’ technology depended upon*. In fact, the government knew before trial that Dr. Das no longer had access to that data. 8-ER-2229. As a result, the court, the jury, and the defense were asked to accept expert testimony based on data that could not be examined or evaluated, a clear violation of the principles underlying the expert discovery rules. *See*

Paul C. Giannelli, *Criminal Discovery, Scientific Evidence, and DNA*, 44 VAND. L. REV. 791, 817 (1991) (“The right to retest” evidence from the prosecution’s experts is “basic[.]”)

Presenting expert testimony without the underlying data available makes no sense under the federal rules of evidence. A fundamental criterion of admissibility is that expert testimony must “rest[] on a reliable foundation.” *Pyramid Technologies, Inc. v. Hartford Casualty Ins.*, [752 F.3d 807, 813](#) (9th Cir. 2014); *Wendell v. GlaxoSmithKline LLC*, [858 F.3d 1227, 1235](#) (9th Cir. 2017) (reliability of expert testimony requires presenting “objective, **verifiable** evidence that the testimony is based on ‘scientifically valid principles.’” (quoting *Daubert v. Merrell Dow Pharms., Inc.*, [43 F.3d 1311, 1317–18](#) (9th Cir. 1995) (emphasis added))). But without any underlying facts or data to test, expert opinion cannot be “verifiable” or “reliable” in any meaningful sense. Anne Bowen Poulin, *Experience-Based Opinion Testimony: Strengthening the Lay Opinion Rule*, 39 PEPP. L. REV. 551, 572 (2012) (Without the basis for an opinion, “the court cannot determine whether the expert witness has employed reliable methodology and applied it reliably to a sufficient basis.”). Presenting Dr. Das’s expert analyses thus contradicted

one of the primary purposes of FRE 702—ensuring that expert testimony relies on concrete, assessable data. *Cf. Gen. Elec. Co. v. Joiner*, [522 U.S. 136, 144](#) (1997) (citation omitted) (“A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.”).

### **III. THIS COURT SHOULD REAFFIRM THE PROTECTIONS OF RULE 16 AND FRE 702**

The Court has the opportunity in this case to curtail the government’s improper use of expert testimony and reaffirm the crucial role the rules governing such testimony play in protecting criminal defendants from abuse. This is especially important given the regularity with which the government violates Rule 16 and FRE 702.

*First*, it is, regrettably, not uncommon that prosecutors fail to timely disclose expert witnesses. There are numerous cases where the government has been chastised for Rule 16 disclosure violations, including in this Circuit. For example, in *United States v. Garcia*, the district court excluded the government’s expert witness testimony because the expert was disclosed eight days after the court’s deadline. [730 F. Supp. 2d 1159, 1168–69](#) (C.D. Cal. 2010). The court explained that this delay “deprived defendant of the opportunity to challenge the qualifications of the expert and/or to argue that the



proposed testimony was improper or unhelpful under Rule 702 . . . .” *Id.* at 1168.<sup>2</sup>

**Second**, it is also not uncommon for prosecutors to offer expert testimony from lay witnesses, and to present expert testimony without proper disclosure of the data on which that testimony is founded. For example, in *United States v. Alvarado*, the government solicited testimony drawing on an Immigration and Customs agent’s specialized experience in law enforcement. 209 F. App’x 685, 687 (9th Cir. 2006). Because the government had not disclosed the agent as an expert, but only as a lay witness, this Court overturned the district court’s decision to allow the agent to testify. *Id.* And in

---

<sup>2</sup> See also, e.g., *Tsosie*, 709 F. App’x at 450 (government’s doctor lay witness precluded from offering expert testimony when not disclosed); *United States v. Afyare*, 632 F. App’x 272, 292 (6th Cir. 2016) (upholding district court’s decision to exclude testimony based on determination that the prosecution was “proffering an expert in lay witness clothing” and “thereby evading the expert-witness disclosure requirements and proffering surprise testimony”); *United States v. Bresil*, 767 F.3d 124, 127 (1st Cir. 2014) (district court abused its discretion by denying defendant’s request for continuance to obtain their own expert after prosecution disclosed intent to call an expert witness five days before trial); *United States v. Wicker*, 848 F.2d 1059, 1061–62 (10th Cir. 1988) (testimony of a prosecution expert was excluded as a discovery violation sanction because the laboratory report had not been disclosed in a timely manner); *United States v. Buchanan*, 964 F. Supp. 533, 538 (D. Mass. 1997) (government’s expert witness testimony excluded due to lateness of disclosure; court found this especially inexcusable given the testimony reached issues “known to the government nearly two years” before disclosure).

*United States v. Valencia-Lopez*, this Court reversed a conviction where the government failed to disclose any data or basis for their expert’s opinion. [971 F.3d 891, 901–03](#) (9th Cir. 2020). Without “any detail [about] the knowledge, investigatory facts and evidence he was drawing from,” the Court could not “sort out what reliable principles and methods underlie[d] the particular conclusions offered.” *Id.* at 901 (internal quotations omitted).<sup>3</sup>

**Third**, this high-profile criminal prosecution provides a useful vehicle for this Court to insist that the guardrails of Rule 16 and FRE 702 be respected. Repeated reliance on improperly-disclosed and unqualified scientific evidence undermines the integrity of criminal trials. A strong statement from this Court may serve to discourage the government from continuing to circumvent the meaningful strictures of Rule 16 and FRE 702 by funneling purportedly “expert” opinions through fact witnesses.

---

<sup>3</sup> See also *United States v. Peoples*, [250 F.3d 630, 642](#) (8th Cir. 2001) (conviction set aside where government’s witness, “[u]nder the guise of offering lay opinion,” provided expert testimony); cf. *United States v. Soto-Beniquez*, [356 F.3d 1, 38](#) (1st Cir. 2003) (government failed to designate witnesses as experts, but not an abuse of discretion because underlying data relied upon was provided to defendants); *Rodriguez v. Gen. Dynamics Armament & Tech. Prod.* [510 F. App’x 675, 676](#) (9th Cir. 2013) (Case reversed and remanded for a new trial where a lay witness presented “specialized and highly technical testimony” and plaintiffs did not receive all of the photographs, physical evidence, or any of the historical malfunction investigation files that [expert] relied on in his testimony.”).

## CONCLUSION

The Court should reverse the conviction and remand for a new trial.

April 24, 2023

Respectfully submitted,

/s/ *Brian T. Goldman*

Daniel M. Sullivan

Brian T. Goldman

Benjamin B. Allen

HOLWELL SHUSTER & GOLDBERG LLP

425 Lexington Avenue

New York, New York

(646) 837-5129

bgoldman@hsgllp.com

*Attorneys for Amicus Curiae*

UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

Form 8. Certificate of Compliance for Briefs

Instructions for this form: <http://www.ca9.uscourts.gov/forms/form08instructions.pdf>

9th Cir. Case Number(s)

22-10312

I am the attorney or self-represented party.

This brief contains

4,046

words, including

0

words

manually counted in any visual images, and excluding the items exempted by FRAP 32(f). The brief's type size and typeface comply with FRAP 32(a)(5) and (6).

I certify that this brief (*select only one*):

- complies with the word limit of Cir. [R. 32-1](#).
- is a **cross-appeal** brief and complies with the word limit of Cir. [R. 28.1-1](#).
- is an **amicus** brief and complies with the word limit of FRAP 29(a)(5), Cir. R. 29-2(c)(2), or Cir. [R. 29-2\(c\)\(3\)](#).
- is for a **death penalty** case and complies with the word limit of Cir. [R. 32-4](#).
- complies with the longer length limit permitted by Cir. [R. 32-2\(b\)](#) because (*select only one*):
  - it is a joint brief submitted by separately represented parties.
  - a party or parties are filing a single brief in response to multiple briefs.
  - a party or parties are filing a single brief in response to a longer joint brief.
- complies with the length limit designated by court order dated .
- is accompanied by a motion to file a longer brief pursuant to Cir. [R. 32-2\(a\)](#).

Signature

/s/ Brian T. Goldman

Date

April 24, 2023

(use "s/[typed name]" to sign electronically-filed documents)

Feedback or questions about this form? Email us at [forms@ca9.uscourts.gov](mailto:forms@ca9.uscourts.gov)

**CERTIFICATE OF SERVICE**

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on April 24, 2023. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

*/s/ Brian T. Goldman*

Brian T. Goldman

April 24, 2023