## In the

## United States Court of Appeals For the Seventh Circuit

United States of America,

Plaintiff-Appellee,

v.

Bryan Protho,

Defendant-Appellant.

Appeal from the United States District Court for the
Northern District of Illinois, Eastern Division.
No. 1:17-cr-827 — Andrea R. Wood, Judge.

Argued February 24, 2022 — Decided July 20, 2022

Before ROVNER, KIRSCH, and JACKSON-AKIWUMI, Circuit Judges.

KIRSCH, *Circuit Judge*. Bryan Protho grabbed a child off the sidewalk and assaulted her in his vehicle. A jury found Protho guilty of kidnapping, and Protho has raised many issues on appeal. Finding no error, we affirm.

I

Days before winter break at her Calumet City, Illinois school, a ten-year-old girl named Amani walked home after class. She started her usual six- or seven-block route with two friends. When those friends turned in a different direction, Amani still had a few blocks left to go. At that point, she noticed a red truck exit a parking lot, pass her, and pull into a driveway. A man got out, walked toward the road, and pretended to use a cellphone. When Amani got close enough, the man grabbed her, pushed her into the vehicle's passenger side, and drove off. In the vehicle, Amani kicked, screamed, and prayed. The man hit her eye and lip and threatened to kill her.

After driving a few blocks, the man parked in an alley and ordered Amani to pull her leggings down. She refused. The man pulled them down himself and touched her inside of her underwear. Amani got out and ran down the alley. She knocked on three unanswered doors and then flagged down a passing car with her coat. In tears, Amani explained to the driver that she had been sexually assaulted, and the driver called 911.

A week after the incident, police arrested Bryan Protho. A grand jury later indicted him for kidnapping in violation of the Federal Kidnapping Act (18 U.S.C. § 1201(a)(1) and (g)(1)). For this charge, the court held a nine-day jury trial. Twentynine witnesses, including Amani and Protho, testified. The trial focused on the kidnapper's identity, not on whether the kidnapping took place (that was uncontested). The jury found Protho guilty, and the district court sentenced him to 38 years' imprisonment and ordered him to pay restitution that included \$87,770 for Amani's psychotherapy needs.

Protho has appealed. Below, we discuss the many issues he has raised, filling in the relevant facts as we go.

H

Protho contends that six trial errors entitle him to acquittal or a new trial. We address and reject each in turn.

## Α

First, Protho moved to exclude testimony from three expert witnesses. In performing its gatekeeping function under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579 (1993), the district court found each expert qualified and their testimony relevant and reliable. Fed. R. Evid. 702(b)–(c) (an expert's testimony must rest on "sufficient facts or data" and "reliable principles and methods"). It thus denied Protho's pre- and post-trial motions challenging the admissibility of the experts' testimony. On appeal, Protho has renewed his challenges to the admission of these experts' testimony. We review the district court's decision to admit or exclude an expert's testimony for abuse of discretion and find none. *United States v. Godinez*, 7 F.4th 628, 637 (7th Cir. 2021); see *Kumho Tire Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999).

1

We start with the first challenged expert: Ashley Baloga, an FBI forensic scientist specializing in the examination of fiber evidence. As Baloga explained, fiber examination aims to determine whether different fibers are consistent with one another by exhibiting the same microscopic characteristics and optical properties. First, to identify a particular fiber, a forensic scientist uses a high-magnification, transmitted-light microscope to look at the fiber's color, shape, lumen, scales, diameter, delustrant particles, and voids. Then, to compare two

fibers to determine consistency with one another, a forensic scientist uses five methods in sequential order, stopping if she finds two fibers inconsistent: (1) view two samples side-byside in the same visual field with high-powered microscopes; (2) use controlled light settings to observe the orientation of polymers on a fiber's axis; (3) illuminate light wavelengths to observe color and intensity of fluorescence; (4) compare the intensity of a fiber's light absorption at different wavelengths against a known spectra; and (5) analyze the fiber's chemical composition through infrared light. Using this methodology, Baloga compared fibers recovered from Protho's vehicle and residence with fibers obtained from the clothing Amani wore on the day of the kidnapping and testified that the fibers were consistent, though she acknowledged that her results could not definitively identify fibers as coming from the same source. Indeed, Baloga disclosed that fiber analysis can "never" associate "a single item to the exclusion of all others" and that consistency alone "is not a means of positive identification."

Protho argues that the government did not offer enough evidence that Baloga's methods had been or could be tested, were subjected to peer review and publication, had a known error rate, or were generally accepted by the scientific community. Although the government—not Protho—had the burden to support Baloga's testimony, Protho did not do much to help his case. He did not meaningfully question Baloga's methods beyond listing the *Daubert* factors and did not cite any contradictory scientific information. Probably for good reason: The National Academy of Sciences, which "was created by Congress ... for the explicit purpose of furnishing" scientific advice to the government, *Pub. Citizen v. U.S. Dep't of Just.*, 491 U.S. 440, 460 n.11 (1989) (citation omitted), has

concluded that fiber analysis can produce "class" evidence, meaning that it can show whether two fibers may have "come from the same type of garment, carpet, or furniture," Nat'l Research Council, Strengthening Forensic Science in the United States: A Path Forward 163 (2009); see *United States v. Herrera*, 704 F.3d 480, 484–87 (7th Cir. 2013) (relying on the same National Academy of Sciences report to hold that "responsible fingerprint matching is admissible evidence"). According to the report, "there are standardized procedures" for fiber analysis, these "analyses are reproducible across laboratories," and fiber analysts routinely take proficiency tests on the subject. Strengthening Forensic Science, at 163.

In finding Baloga's opinion admissible here, the district court relied upon Baloga's background, experience, expert report, testimony, and upon the regular admission of fiber-analyst testimony in courts across the country. Specifically, the district court found that the conclusions reached by fiber analysis were falsifiable; another expert could undertake the same series of steps to reach her own conclusions about the consistency of two fibers. The court also found that fiber analysis was generally accepted in the relevant scientific community because fiber experts were regularly qualified as expert witnesses in federal court and that their methods were commonly employed. And it found that the scope of Baloga's testimony was appropriately confined because she candidly acknowledged the limitations of her analysis, which could show only whether fibers were consistent with each other and thus *could* have come from the same source.

In undertaking their gatekeeping role, district judges must assess whether the reasoning or methodology underlying an expert's testimony meets "the same level of intellectual rigor

that characterizes the practice of an expert in the relevant field." *Kumho Tire*, 526 U.S. at 141, 149–52 (citation omitted and cleaned up). This calls for a "flexible" approach "tied to the facts of a particular case." *Id.* Indeed, "*Daubert* makes clear that the factors it mentions do not constitute a definitive checklist or test." *Id.* at 150 (citation omitted and cleaned up). Given this flexibility, district courts have "broad latitude" in deciding both "how to determine reliability" and in "the ultimate reliability determination." *Id.* at 142 (emphasis omitted). Once a district judge properly finds an expert's testimony relevant and reliable, any challenge to it goes to its "weight, ... not its admissibility." *Lees v. Carthage Coll.*, 714 F.3d 516, 525 (7th Cir. 2013); see *Deputy v. Lehman Bros.*, 345 F.3d 494, 506 (7th Cir. 2003) ("[W]hether an expert's theory is correct is a factual question for the jury to determine.").

Here, we have been given no reason to second-guess the district court's conclusion that Baloga's methods met the same level of rigor as others in her field. Based on our own review of Baloga's testimony and expert report, it's clear that her testimony stayed within reliable scientific bounds. See Lapsley v. Xtek, Inc., 689 F.3d 802, 814 (7th Cir. 2012) (affirming admission of expert testimony based on the expert's own "report, calculations, and deposition testimony"). Indeed, we think Baloga reached her opinion with the "soundness and care" expected of experts. Schultz v. Akzo Nobel Paints, LLC, 721 F.3d 426, 431 (7th Cir. 2013). And although the validity of fiber analysis can-like other scientific evidence-still be questioned in future cases, we do not doubt the district judge's conclusion here that the relevant scientific community has generally accepted this type of fiber analysis. Nor do we doubt that the results reached by this kind of analysis are "falsifiable," i.e., that the same samples could be re-examined,

and the original results shown to be accurate or not. See, e.g., *State v. Fukusaku*, 946 P.2d 32, 43–44 (Haw. 1997) ("The principles and procedures underlying ... fiber evidence are overwhelmingly accepted as reliable.") (listing cases and secondary sources); Strengthening Forensic Science, at 161–63.

2

Protho next challenges the testimony of Anthony Imel, an FBI photographic technologist who analyzed surveillance videos that were admitted at trial. Imel testified on the image enhancements he made to the surveillance videos and on the subjects captured in those videos. The court also allowed Imel to testify about visual characteristics of the kidnapper's vehicle, Protho's vehicle, the kidnapper, and Protho.

Protho argues that the testimony did not rest on any reliable or generally accepted scientific standards and did not employ peer-reviewed methods. But Imel had extensive experience and specialized expertise in reviewing visual evidence (which Protho has not challenged), and "no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience." Kumho Tire, 526 U.S. at 156; see Fed. R. Evid. 702 advisory committee's note to 2000 amendments ("In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony."); United States v. Parkhurst, 865 F.3d 509, 516-17 (7th Cir. 2017) (holding scientific methodologies and peer review unnecessary for expert's experience-based testimony on online strategies used by child predators); *Metavante Corp.* v. Emigrant Sav. Bank, 619 F.3d 748, 761-62 (7th Cir. 2010) ("An expert's testimony is not unreliable simply because it is founded on his experience rather than on data[.]").

Protho also argues that Imel usurped the jury's role. But Imel testified about demonstrative videos he created as pedagogical summaries to aid the jury in its understanding of admitted evidence. See *United States v. White*, 737 F.3d 1121, 1135 (7th Cir. 2013). And for demonstrative exhibits allowed by a district judge under Federal Rule of Evidence 611(a), the testifying witness may generally offer conclusions, opinions, and "reveal inferences drawn in a way that would assist the jury." *Id.* (citation omitted). Imel's testimony thus only aided—not usurped—the jury's factfinding task.

3

Last, Protho challenges the admission of testimony from Matthew Fyie, a manager of the Design Analysis Engineering Department at Ford. Fyie testified about the make, model, and year of the kidnapper's vehicle identified in the surveillance videos. On appeal, Protho argues that the district court abused its discretion by allowing Fyie to testify because he lacked expertise on Ford products.

Yet we fail to see how that could be. Fyie has a master's degree in mechanical engineering from the University of Michigan and has worked for Ford for nearly 30 years. Fyie's position, engineering education, and nearly three decades at Ford make him abundantly qualified to opine on the appearance and identity of Ford's products. And nothing suggests any unreliability in Fyie's straightforward, experience-based testimony identifying a specific Ford vehicle. See *Kumho Tire*, 526 U.S. at 156; Fed. R. Evid. 702 advisory committee's note to 2000 amendments; *Parkhurst*, 865 F.3d at 516–17; *Metavante Corp.*, 619 F.3d at 761–62.

We next review Protho's contention that the government struck two prospective Black jurors based on their race in violation of Batson v. Kentucky, 476 U.S. 79 (1986). Prosecutors "may not discriminate on the basis of race when exercising peremptory challenges against prospective jurors in a criminal trial." Flowers v. Mississippi, 139 S. Ct. 2228, 2234 (2019); see United States v. Hughes, 970 F.2d 227, 230 (7th Cir. 1992) (noting that *Batson* "extends to the federal government through the Due Process Clause of the Fifth Amendment"). To determine whether such discrimination has occurred, courts use the familiar, three-step *Batson* framework. First, the defendant can establish a rebuttable presumption of purposeful racial discrimination by showing that: (1) he is a member of a cognizable racial group; (2) the prosecution exercised peremptory challenges to remove potential jurors of the defendant's race; and (3) other facts support an inference that the prosecutor used its peremptory strikes to exclude potential jurors on account of their race. Batson, 476 U.S. at 96. Second, if a defendant makes that showing, the government has the burden to come forward with a neutral, reasonably specific explanation for striking the juror. *Id.* at 97–98 & n.20. Third, once the government satisfies its step two burden, the trial court then has the duty to determine whether the government was "motivated in substantial part by discriminatory intent." Flowers, 139 S. Ct. at 2244 (citation omitted); see Batson, 476 U.S. at 98.

Protho raised *Batson* challenges to peremptory strikes of Jurors 16 and 46, both of whom were Black. Because the seated jury included no Black jurors, the district court found that Protho had cleared the "low bar" for establishing a prima

facie *Batson* violation, which shifted the burden to the government to offer a race-neutral reason for striking the two challenged jurors.

The government stated that it struck Juror 16 because she worked from 11:00 p.m. to 7:00 a.m., served as the primary caretaker for four children, was "too stoic" after hearing the criminal allegations, and gave one-word answers to most questions at voir dire. And second, the government stated that it struck Juror 46 (a 75-year-old Black woman with a Ph.D.) because she had her eyes closed during voir dire, seemed to have trouble hearing, did not seem to follow along, and trailed off during answers to the court's questions.

Finding that the government had met its burden at step two, the district court turned to the key question: had Protho established purposeful discrimination? The court found that he had not, giving several reasons. The court found the government's desire to have a juror who reacts more strongly to criminal allegations than Juror 16 a race-neutral (if not entirely judicious) reason for exercising the peremptory strike. The court found the two white jurors identified by Protho as "stoic" differently situated because, unlike Juror 16 who stated that she participated in "no activities," the two white jurors shared more about their activities and interests on their juror forms. And the court found Juror 46 similarly situated to another 75-year-old white juror with an advanced degree for whom the government also exercised a peremptory strike.

On appeal, Protho argues that the district court erred in making these findings. We review a district court's factual findings about a prosecutor's discriminatory intent in a *Batson* challenge for clear error. See *United States v. Lovies*, 16 F.4th 493, 500 (7th Cir. 2021); *Rice v. Collins*, 546 U.S. 333, 338 (2006)

("On direct appeal in federal court, the credibility findings a trial court makes in a *Batson* inquiry are reviewed for clear error.").

Starting with Juror 16, Protho repeats his argument made below about two similarly "stoic" white jurors not struck by the government. But the district court credited the government's account that it had more information about those jurors' activities and interests than Juror 16, and we see no basis in the record to hold that factual finding clearly erroneous.

Second, Protho argues that the government's insistence that it struck Juror 16 because she did not react strongly enough to the alleged crime reveals pretext for race discrimination. In his view, this explanation contradicts the government's stated commitment to being fair and impartial during the trial. We do not necessarily see anything inconsistent with striking jurors who seem unsympathetic to one's view of the case and wanting a trial to be fair. And although we share Protho's concerns about the wisdom of permitting stoicism alone to support striking a prospective juror, there's nothing inherently race-based in that explanation. We understand that a decision to strike a Black woman as a prospective juror based on stoicism alone could, in some cases, arise from racial and gender biases. But the district judge also independently observed that Juror 16's demeanor was "stoic," and we have not been given reason to question that finding. See *United* States v. Tsarnaev, 142 S. Ct. 1024, 1034 (2022) ("[J]ury selection falls particularly within the province of the trial judge" "because a trial judge's appraisal is ordinarily influenced by a host of factors impossible to capture fully in the record, such as a prospective juror's inflection, sincerity, demeanor, candor, body language, and apprehension of duty") (citations

omitted and cleaned up). Besides, stoicism alone was not the sole motivation for the government's strike of Juror 16. The government expressed concern that she worked as a night-shift manager at McDonald's (indeed, she worked until 3:00 a.m. on the day of the voir dire), was the primary caretaker for four children, and did not offer information about her out-side activities on her juror form. For these reasons, we hold that the district court did not clearly err in denying Protho's *Batson* challenge to Juror 16.

As for Juror 46, Protho sees pretext in the government's explanation that it struck her for inattentiveness. If that were so, Protho argues, then the government would have struck her for cause. But the government explained that it did not challenge Juror 46 for cause because it had thought the effort futile. The district court had already denied one of its forcause strikes with a stronger foundation (the potential juror had said that he generally didn't believe law enforcement). The district court had a right to credit that neutral explanation. In short, the district court did not clearly err in handling either of Protho's *Batson* challenges.

C

Pursuant to 18 U.S.C. § 3509, the district court allowed Amani (who was twelve years old at the time of trial) to testify via closed-circuit television from another location within the courthouse. When Amani first tried to take the witness stand, outside the jury's presence, she saw Protho and broke down. Her breakdown required her to exit the courtroom and, after reaching the hallway, she collapsed.

On appeal, Protho contends that the district court improperly applied § 3509 and that this manner of testimony also

violated the Sixth Amendment's Confrontation Clause. We review legal issues relating to § 3509 and the Sixth Amendment's Confrontation Clause de novo and any factual determinations underlying these legal issues for clear error. See *United States v. Jackson*, 940 F.3d 347, 351 (7th Cir. 2019); *United States v. Bell*, 925 F.3d 362, 375–76 (7th Cir. 2019) (reviewing factual findings for alleged Sixth Amendment speedy trial right violation for clear error).

1

"In a proceeding involving an alleged offense against a child," a court may "order that the child's testimony be taken in a room outside the courtroom and be televised by 2-way closed circuit television." 18 U.S.C. § 3509(b)(1). To do so, the court must make a factual "find[ing] that the child is unable to testify in open court in the presence of the defendant" for any of four specified reasons, including an inability to testify "because of fear." *Id.* 

The day after Amani broke down on the stand, the district court held an evidentiary hearing on this issue and heard testimony from two witnesses who were with Amani during her courtroom appearance and subsequent breakdown. After the evidentiary hearing, the court made the following factual findings. In her preparations for trial (including a visit to the courtroom), Amani had an upbeat disposition and expressed an interest in courtroom proceedings. On the day of the incident, Amani entered the courtroom, took the witness stand (outside the presence of the jury), looked "right at Protho," started having trouble breathing, and "broke down into tears." After several minutes, "it was apparent that [Amani] would not be able to testify," and she was escorted out of the courtroom. Upon exiting the courtroom, Amani "collapsed to

the floor," "sobbed," and "appeared to be in a state of shock." Amani was then taken to an empty courtroom nearby, and the adults caring for her noticed that "[h]er eyes were darting all over the place" and that she "repeatedly" stated that "she felt like she was back in the car in which she was kidnapped." Amani later stated that "she was shocked upon seeing Protho and could not control herself" and that she was expecting him to be wearing an orange prisoner jumpsuit. Given these facts, the district court found Amani "afraid not just of testifying but of testifying in the same room as Protho" and that testimony by two-way CCTV was "necessary to protect [Amani's] welfare" because calling her to testify in Protho's presence "would cause her substantial emotional trauma."

Protho argues that the evidentiary record is at best ambiguous as to what happened and why or how it happened. But we cannot overturn a district court's factual findings based on an alleged ambiguity; only a clear error allows for that. In any event, we see no error—let alone a clear error—in the district court's findings. It's obvious what happened in this case. A twelve-year-old girl was quite certain she saw the man who had kidnapped and sexually assaulted her sitting before her in the courtroom, and she understandably suffered severe fear, which rendered her unable to testify in his presence.

Protho also argues that the district court relied on hearsay statements in making these findings. Yet he failed to object to any statements at the evidentiary hearing on hearsay grounds, so he has forfeited any objection absent plain error. *United States v. Franklin*, 197 F.3d 266, 270 (7th Cir. 1999). And Protho has shown no such plain error because hearsay rules do not apply to preliminary examinations in a criminal case. See Fed. R. Evid. 1101(d)(3).

Finally, Protho contends that the district court should have required Amani to testify about her breakdown. Again, Protho did not object to the district court holding the evidentiary hearing in Amani's absence, so we review only for plain error. See *Franklin*, 197 F.3d at 270. Protho cites no authority requiring a child's direct testimony before entering a § 3509(b) order, and as we noted above, hearsay is admissible, so we see no plain error. The district court did not err in finding that Amani was prevented from testifying in person "because of fear" under § 3509(b)(1).

2

The Sixth Amendment guarantees the accused in a criminal prosecution "the right ... to be confronted with the witnesses against him." U.S. Const. amend. VI. The Constitution thus protects a defendant from the admission of testimonial evidence absent confrontation. Crawford v. Washington, 541 U.S. 36, 68 (2004). Protho argues that Amani's out-of-court testimony violated his confrontation right, which includes the opportunity to cross-examine an adverse witness, id., and generally requires a witness's physical presence at trial under oath and the chance for the jury to observe the witness's demeanor, see Maryland v. Craig, 497 U.S. 836, 845-46 (1990). Amani's testimony had all but one of these components. She was under oath and cross-examined in person by Protho's counsel, who was in the same room with Amani. Protho, the judge, and the jury contemporaneously viewed Amani's testimony in the courtroom, and Amani, in turn, could see and hear the judge and Protho. And Protho had the opportunity to text his attorney during Amani's testimony to ask questions and express his thoughts. Amani's physical presence in the courtroom was the only thing missing.

Yet face-to-face confrontation at trial "is not the sine qua non of the confrontation right." Id. at 847. And the Supreme Court has "never insisted on an actual face-to-face encounter in every instance in which testimony is admitted against a defendant." Id.; see California v. Green, 399 U.S. 149, 165 (1970); *Mattox v. United States*, 156 U.S. 237, 243–44 (1895). Nor have we found a lower court holding that, under similar circumstances, a witness's physical absence from the courtroom violates the Confrontation Clause. In fact, the Supreme Court has upheld a state's more restrictive alternative to the procedure used here against a Confrontation Clause challenge. In *Craig*, the Supreme Court upheld a state law allowing child witnesses to testify against defendants via a one-way closed-circuit television (the witness could not see the defendant) rather than the two-way closed-circuit television procedure here (Amani and Protho could see one another). 497 U.S. at 851–52. The Court held that the government has a compelling interest in protecting minor victims of sex crimes from further trauma and embarrassment. Id. at 852–58. It also held that this interest outweighs a defendant's right to face his accuser when a district court makes three findings: (1) the procedure "is necessary to protect the welfare of the particular child witness who seeks to testify"; (2) "the child witness would be traumatized, not by the courtroom generally, but by the presence of the defendant"; and (3) "the emotional distress suffered by the child witness in the presence of the defendant is more than *de min*imis, i.e., more than mere nervousness or excitement or some reluctance to testify." Id. at 852-58 (citation omitted). The district court made those findings here. It found testimony by two-way CCTV "necessary to protect [Amani's] welfare" because calling her to testify in Protho's presence "would cause her substantial emotional trauma." And it found that Amani

was "afraid not just of testifying but of testifying in the same room as Protho."

Protho's contrary argument asks this court to ignore the holding in *Craig* based on the Supreme Court's later decision in Crawford v. Washington, 541 U.S. 36 (2004). But "Crawford did not overturn Craig." United States v. Wandahsega, 924 F.3d 868, 879 (6th Cir. 2019). And we lack power to depart from an on-point Supreme Court precedent. See, e.g., Bosse v. Oklahoma, 137 S. Ct. 1, 2 (2016) (per curiam) ("Our decisions remain binding precedent until we see fit to reconsider them, regardless of whether subsequent cases have raised doubts about their continuing vitality.") (citation omitted). Crawford involved a declarant's tape-recorded statement to the police describing the stabbing for which the defendant was on trial. 541 U.S. at 38. The trial court allowed the jury to hear the tape even though the defendant had no opportunity for cross-examination of the declarant, and the Supreme Court held that this violated the defendant's right to confrontation. *Id.* at 38, 68. In contrast, Protho's counsel had the ability to (and did) fully cross-examine Amani, as required by the Confrontation Clause. So *Crawford* is inapt, and *Craig* governs here. To that end, we hold that Protho suffered no Sixth Amendment violation.

D

Next, we address Protho's Commerce Clause challenge. After the government rested its case, Protho moved for acquittal. In his view, the prosecution failed to offer evidence of a nexus between his actions and interstate commerce. Protho also objected to the government's tendered instruction on the Federal Kidnapping Act's interstate-commerce element on a similar ground. The district court rejected both arguments.

We review whether a criminal statute is constitutionally applied and whether a challenged jury instruction accurately summarizes the law de novo. See *United States v. Burrows*, 905 F.3d 1061, 1062–63 (7th Cir. 2018); *United States v. Erramilli*, 788 F.3d 723, 730 (7th Cir. 2015).

The Constitution vests Congress with the power "[t]o make all Laws which shall be necessary and proper for carrying into Execution" its authority "[t]o regulate Commerce ... among the several States." U.S. Const. art. I § 8. This power allows Congress to "regulate and protect the instrumentalities of interstate commerce, or persons or things in interstate commerce, even though the threat may come only from intrastate activities." *United States v. Lopez*, 514 U.S. 549, 558 (1995) (listing cases); see *Cleveland v. United States*, 329 U.S. 14, 19 (1946) ("The power of Congress over the instrumentalities of interstate commerce is plenary[.]"). Wielding this authority, Congress amended the Federal Kidnapping Act in 2006 to criminalize any person who:

unlawfully ... kidnaps, abducts, or carries away ... and holds for ransom or reward or otherwise any person ... when ... the offender ... uses ... any means, facility, or instrumentality of interstate or foreign commerce in committing or in furtherance of the commission of the offense.

18 U.S.C. § 1201(a)(1); see Adam Walsh Child Protection and Safety Act of 2006, Pub. L. No. 109-248, 120 Stat. 587, 616–17.

Convicting Protho thus required answering whether he "use[d] any means, facility, or instrumentality of interstate ... commerce in committing or in furtherance of the commission of" Amani's kidnapping. The answer was yes, according to

the district court, if the jury found that Protho had used a vehicle to commit the kidnapping. The court thus gave the following jury instruction:

The defendant used a means, facility, or instrumentality of interstate commerce if he used an automobile in committing or in furtherance of the commission of the offense.

Protho agrees that automobiles are generally treated as instrumentalities of interstate commerce. Even so, he argues that an automobile can only qualify as an instrumentality of interstate commerce when evidence shows that the specific automobile at issue was, at some point, used for that purpose. In other words, he argues that courts must view automobiles individually—rather than as a class—when deciding their instrumentality status.

Even if we were to accept Protho's legal argument, however, there's no doubt that the Ford Explorer at issue was used in interstate commerce. On the day of the kidnapping, Protho drove the Ford Explorer interstate (from his home in East Chicago, Indiana, to the site of the kidnapping in Calumet City, Illinois). Protho also testified that, on the same day, he crossed state lines in the Ford Explorer to conduct a drug deal in Illinois and to obtain medical services at an Indiana hospital. And Protho regularly drove the Ford Explorer from his home in Indiana to his employer in Illinois. So the Ford Explorer at issue was used in interstate commerce.

But we do not agree with Protho's view that the Commerce Clause asks us to consider each automobile's specific use in interstate commerce. Instead, it's the *nature* of the regulated object's class (here, automobiles) rather than the

particular *use* of one member of that class (Protho's Ford Explorer) that matters. We made this clear when interpreting a similar statute, 18 U.S.C. § 1958(a), which criminalizes the use of "any facility of interstate or foreign commerce" in a murder-for-hire scheme. See *United States v. Mandel*, 647 F.3d 710, 720, 722 (7th Cir. 2011) ("[F]ederal jurisdiction is supplied by the nature of the instrumentality or facility used, not by separate proof of interstate movement.") (citation omitted).

Nearly all circuits have followed this course when faced with similar questions, and no circuit has adopted Protho's proposal. See, e.g., United States v. Bishop, 66 F.3d 569, 590 (3d Cir. 1995) ("conclud[ing] that motor vehicles are instrumentalities of interstate commerce"); United States v. Cobb, 144 F.3d 319, 322 (4th Cir. 1998) (holding that "[c]ars, like trains and aircraft" are instrumentalities of interstate commerce because they are "inherently mobile and indispensable to the interstate movement of persons and goods"); United States v. McHenry, 97 F.3d 125, 126–27 (6th Cir. 1996) (holding that cars are instrumentalities of interstate commerce); United States v. Robinson, 62 F.3d 234, 236–37 (8th Cir. 1995) (holding that motor vehicles are "item[s] in interstate commerce"); United States v. Oliver, 60 F.3d 547, 550 (9th Cir. 1995) ("[C]ars are themselves instrumentalities of commerce, which Congress may protect."); cf. United States v. Morgan, 748 F.3d 1024, 1034 (10th Cir. 2014) (holding that cellphones, the internet, and GPS devices are instrumentalities of interstate commerce for purposes of the Federal Kidnapping Act); but see Garcia v. Vanguard Car Rental USA, Inc., 540 F.3d 1242, 1250 (11th Cir. 2008) (passing over the question of whether automobiles are "per se instrumentalities of commerce"). We thus have no trouble holding that the district court correctly denied Protho's motion of acquittal on this basis and properly instructed

the jury on the interstate-commerce element of the Federal Kidnapping Act.

E

Protho's next argument relates to a comment made by the prosecutor during closing arguments. During the government's closing rebuttal argument, the prosecutor stated:

And I'm sorry that a 12 -- a 12-year-old girl doesn't want to be in the same room as the man who took her off the street and sexually assaulted her. Next time pick an older victim.

Protho's counsel objected, and the district court sustained that objection in front of the jury:

Yeah, I'm going to sustain that objection, and I'm going to instruct the jury to disregard that portion of the argument. And, [prosecutor], you're getting close to the line there. I think that was actually a little across the line. Don't do that again.

Protho moved for a mistrial based on the prosecutor's comment. In his view, the comment deprived him of his right to due process. The district court found the prosecutor's comment improper but denied the motion for mistrial based on a lack of prejudice because: (1) the court sustained the objection and issued a curative instruction for the jury to disregard the comment; (2) the jury had heard multiple times that the lawyers' arguments did not qualify as evidence; (3) the prosecutor's comment lacked specificity and was encompassed within an argument on a different point; and (4) "[t]he evidence at trial overwhelmingly indicated that Protho

committed the crime and his alibi defense was, to put it lightly, less than convincing."

On appeal, Protho contends that the district court erred by denying his motion for a mistrial. We review a district court's decision to issue a cautionary instruction after sustaining a defendant's objection to a comment in closing argument and to deny a defendant's motion for a new trial based on that comment for abuse of discretion. See *United States v. Chavez*, 12 F.4th 716, 727–28 (7th Cir. 2021); United States v. Miller, 199 F.3d 416, 421–24 (7th Cir. 1999). In evaluating whether a prosecutor's comments made during closing arguments violate a defendant's Fifth Amendment right to due process, this court asks first "whether the comments themselves were improper" and, if so, whether the statements, "taken in the context of the entire record, deprived the defendant of a fair trial." United States v. Sandoval, 347 F.3d 627, 631 (7th Cir. 2003); see United States v. Common, 818 F.3d 323, 331 (7th Cir. 2016). Like the parties, we assume (without deciding) that the prosecutor's arguments were improper. So we focus on prejudice. To determine whether a prosecutor's comment is prejudicial, we assess, after considering the entire record, (1) the nature and seriousness of the prosecutorial misconduct; (2) whether defense counsel invited the misconduct; (3) the adequacy of the district court's jury instructions; (4) the defense's opportunity to counter the improper argument; and (5) the weight of the evidence supporting the conviction. See Common, 818 F.3d at 332–33; Sandoval, 347 F.3d at 631.

Protho focuses on the first prejudice factor: the nature and seriousness of the prosecutorial misconduct. He argues that the comments wrongfully suggested that Amani was both familiar with and fearful of him. But Amani's testimony—not

the prosecutor's comment—already made it abundantly clear that she feared Protho, whom she had identified as her attacker. Protho also argues that the prosecutor's comment provided an excuse and explanation for Amani's failure to identify Protho in court. Yet the district court had instructed the jury that Amani was testifying by videoconference from another location because of her age. So the jury already had an explanation for why Amani was not present in the courtroom to make an in-court identification. We see little reason for thinking the jury made much of this passing comment.

For the other factors, Protho's counsel didn't invite this error (factor 2) and didn't get the chance to counter the prosecutor's argument since it was made in rebuttal (factor 4). But the other remaining factors strongly weigh against finding prejudice here. The district court promptly instructed the jury to disregard the comment and reprimanded the prosecutor in front of the jury (factor 3). Cf. United States v. Warner, 498 F.3d 666, 683 (7th Cir. 2007) ("There is a general presumption that juries follow their instructions."). And we agree with the district court that overwhelming evidence supports Protho's guilt (factor 5). A surveillance video captured the kidnapping; that video and others showed a Ford Explorer with distinctive features matching Protho's, the one in which he was arrested one week later; and Protho admitted that he drove it near the area within minutes of the kidnapping. Amani described her attacker in a way that generally matched Protho's appearance on the day of the kidnapping (as captured in surveillance footage), and she correctly identified Protho as her kidnapper in a photo array. Moreover, the FBI's fiber expert testified about potential fiber transfer between clothing from Protho and Amani.

But even with all of this evidence, what makes us most confident about Protho's guilt is his own trial testimony. Protho's tale was, in the district court's words, "patently unbelievable." Protho testified about a three-location, attempted but ultimately failed, marijuana purchase from a childhood friend named "Ell" (with an unknown last name and no evidence of his existence) on the day of the kidnapping. That friend happened to match the kidnapper's appearance to the "T." Two years after the kidnapping, Protho remembered the color of the drawstrings on Ell's sweatshirt worn on the day Amani was kidnapped. Ell also happened to borrow—for the first time in their fifteen-year friendship—Protho's Ford Explorer, the vehicle used by the kidnapper, on the day, and indeed, during the very period the kidnapping took place. To boot, Protho also could not keep his story straight. A week after the kidnapping, Protho told investigators that no one had used his Ford Explorer the prior week. Yet at trial, he testified that Ell had borrowed it on the day of the kidnapping. And when Protho visited an emergency room on the night of the kidnapping, he told them he had hurt his hand on his car's hood. But on the stand, he testified that his fingernail came loose after a fight with Ell. And even if we could accept Protho's version of events suggesting that Ell—not Protho—really kidnapped Amani, a jury would have to believe that Amani wrongly picked Protho out in the photo array but happened to correctly select the man whose Ford Explorer was used by her real kidnapper. None of that makes sense. So even if the prosecutor's comment were improper (an issue we do not decide), we agree with the district court that Protho suffered no prejudice from it. We thus hold that the district court did not abuse its discretion in denying Protho's motion for a mistrial.

For the last alleged trial error, Protho argues that the district court improperly responded to an evidentiary question during jury deliberations. We "review a decision to answer a question from the jury as well as the language used in the response for an abuse of discretion." *United States v. Hewlett*, 453 F.3d 876, 880 (7th Cir. 2006).

A few hours after starting deliberations, the jury submitted the following note to the court:

Can someone ask the US Attorney to confirm which video shows the defendant getting out of his car, walking around for a few seconds, then getting back in car[?] Showed him from waist down. Could be an extract of an original video.

Protho agreed that Government's Exhibit 13 addressed this request. Over Protho's counsel's objection, the court decided to substantively respond to the note. Otherwise, the jury would have to "go on sort of a hunt for truffles amongst all of the videos to try to find the one that they're looking for when they seem to have a very specific item in mind." The judge then proposed language responding to the note, and Protho's counsel did not object to it. The court sent the jury the following note:

The third file of Government Exhibit 13 shows an individual from the waist down exiting and subsequently reentering a vehicle as described in juror note No. 2.

On appeal, Protho contends that no substantive response to a jury's evidentiary question is permissible and, alternatively, even if a response is generally permissible, the court's

response here was not. To Protho's first argument, the district court has discretion on both whether and how to answer a jury's question. See *Hewlett*, 453 F.3d at 880. As Protho points out, a district court cannot "attempt[] to override or interfere with the jurors' independent judgment in a manner contrary to the interests of the accused." *United States v. Martin Linen Supply Co.*, 430 U.S. 564, 572–73 (1977). But Protho has provided no authority supporting his argument that merely identifying an exhibit which the jury specifically requested somehow interferes with the jury's independence.

As to his second argument, Protho has waived any challenge to the instruction's language by failing to object below. After the court decided to provide a substantive response to the note, Protho's counsel agreed with the response's proposed language. Indeed, Protho's counsel even requested a change to the court's proposed instruction, which the court then made. This approval of the instruction's language waived any appellate challenge to it. Cf. *United States v. Edgeworth*, 889 F.3d 350, 355 (7th Cir. 2018) (approval of a jury instruction waives appellate challenge to that instruction). We thus hold that the court did not abuse its discretion in responding to the jury's note.

III

Having found no error at or before trial, we next consider Protho's sentence. He contends that the district court erred by awarding \$87,770 in restitution based on the projected cost of Amani's psychotherapy. A district court's restitution order may require the defendant to pay any victim harmed by the defendant's offense the cost of necessary medical and related professional services for psychiatric and psychological care. See 18 U.S.C. §§ 3663, 3663A; *United States v. Danser*, 270 F.3d

451, 455 (7th Cir. 2001) (holding that similar language in 18 U.S.C. § 2259 "allows for restitutionary damages for the future costs of therapy"). We review a district court's restitution calculation for abuse of discretion, taking the evidence in the light most favorable to the government. *United States v. Alverez*, 21 F.4th 499, 502–03 (7th Cir. 2021) (citation omitted).

On Amani's need for psychotherapy, the district court found the government's expert, Dr. Diana Goldstein, a licensed clinical neuropsychologist, "very well qualified in her field" and thus gave her testimony a "significant amount of weight." Dr. Goldstein's expert report noted that a child in Amani's position would require, as a conservative estimate, 24 months of outpatient treatment. But Dr. Goldstein also testified that some patients in Amani's position could need treatment and struggle for the rest of their lives. Moreover, Dr. Goldstein testified that Amani may have suffered a dissociative experience (a type of psychosis related to post-traumatic stress disorder) during her trial breakdown. Amani had already received more than 24 months of treatment, and the district court found it "pretty clear that an additional period of time [wa]s warranted" because Amani was still suffering the effects of the trauma based on her reaction to seeing Protho. The court found that Amani would need a substantial amount of therapy going forward based on her age and the event's traumatic nature. The district court therefore projected that Amani would need therapy for eight more years (ten years total), which would cost \$87,770.

On appeal, Protho does not contest the estimated annual therapy cost (\$8,777) or dispute that Amani had undergone treatment for two years. But he argues that the district court's estimate that Amani would need treatment for eight more

years lacked adequate evidentiary support. After viewing the evidence in the light most favorable to the government, we find that the district court did not abuse its discretion in projecting that Amani would require treatment for eight more years. See *Alverez*, 21 F.4th at 502–03. Determining the duration of future psychological treatment, as a prediction, necessarily prevents any conclusion based on mathematical certainty. Cf. Danser, 270 F.3d at 455–56 (rejecting the defendant's argument that restitution calculation for the victim's future psychiatric therapy "was not determined with a degree of reasonable certainty"). And the district court's finding that Amani would require treatment at least until she was 20 years old does not strike us as an unreasonable duration for someone in her position, as a child snatched by a total stranger on her walk home from school, threatened with death, and sexually assaulted. Indeed, Dr. Goldstein's expert testimony and report suggested that Amani may have suffered from a form of psychosis when she first tried to testify in court, even after two years of therapy, and that some similar patients may require treatment for life.

**AFFIRMED** 

JACKSON-AKIWUMI, *Circuit Judge*, concurring in part. I agree with much of the lead opinion's analysis, except that I would hold that the district court abused its discretion when it admitted the testimony of the government's fiber-analysis expert, FBI Forensic Examiner Ashley Baloga. Although the court reasonably concluded that Baloga was qualified to give opinions about fiber comparison, the government failed to make any showing that the methods she employed were reliable. I nonetheless join my colleagues in affirming Protho's conviction because Baloga's testimony was only a small part of the evidence supporting the jury's guilty verdict, rendering the error harmless.

As with the lead opinion, my analysis starts with Rule 702 of the Federal Rules of Evidence and Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993). Rule 702 has four requirements: (a) the witness must be qualified as an expert with scientific, technical, or other specialized knowledge that will help the jury; (b) the testimony must be based on sufficient facts or data; (c) the testimony must be "the product of reliable principles and methods"; and (d) the expert must have reliably applied those principles and methods to the facts of the case. Fed. R. Evid. 702(a)–(d). The government satisfied requirements (a), (b), and (d): it supplied evidence of Baloga's qualifications, that she relied on data culled from the crime scene, and that she applied a "five-step process" to reach her conclusions. But the government failed to present any evidence regarding the reliability of that "five-step process." When a proponent of expert testimony fails to satisfy Rule 702(c)'s requirement of showing that an expert's methods are reliable, Rule 702's remaining requirements are meaningless. Even the most assiduous adherence to an established method

will not produce reliable results if the underlying method is flawed. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 151 (1999) (explaining that the application of methods generally accepted within a discipline will not establish reliability if "the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy").

To assess the reliability of an expert's methods, courts apply the standards described in *Daubert*. The Supreme Court outlined four factors that govern a court's evaluation: (1) whether the scientific theory can be and has been tested; (2) whether the theory has been subjected to peer-review or academic publication; (3) whether the theory has a known or potential rate of error; and (4) whether the theory is generally accepted in the relevant scientific community. *Daubert*, 509 U.S. at 593–94. This list is "neither exhaustive nor mandatory"; reliability is assessed on a case-by-case basis. *C.W. ex rel. Wood v. Textron, Inc.*, 807 F.3d 827, 835 (7th Cir. 2015).

None of the *Daubert* factors were present here. Baloga's expert report is barebones. It does not explain whether her fiber-comparison methods have been tested, have been peer reviewed or published in an academic journal, or have a known error rate. Nor does it provide any evidence from which the district court could conclude that her methods are generally accepted in the scientific community. Baloga's report does not even clarify whether she followed all five steps in her five-step method; the report merely states that "[m]icroscopic examination of textile fibers is accomplished by *using one or more* analytical techniques [mentioned in the report]" (emphasis added). And although Baloga describes each step of her process, she does so only in an attached slideshow presentation

and only in broad, jargon-laden terms. For example, her presentation notes that "fluorescence microscopy" means to "[i]lluminate fiber with various wavelengths of light to observe color and intensity of fluorescence." She provides no further explanation, and it is not clear whether "fluorescence microscopy" involves more than simply shining a light on fibers while magnifying them.

The district court nonetheless concluded that Baloga's methods were reliable for two reasons: (1) her conclusions are falsifiable; and (2) fiber-evidence experts with similar qualifications have been admitted in other cases. Both reasons fall well below the *Daubert* standard.

First, the district court's finding that Baloga's conclusions are falsifiable was insufficient on its own to conclude that her methods were reliable. Falsifiability is the idea that a prediction can, in principle, be proven to be false. *United States v. Mitchell*, 365 F.3d 215, 235 (3d Cir. 2004). It is a cornerstone of modern science and part of what separates science from other fields of human inquiry. *See Daubert*, 509 U.S. at 593. I agree with the district court that Baloga's fiber-analysis methods are falsifiable in the abstract sense that they *could* be disproven by showing that two matched fibers did not come from the same source. But falsifiability alone is not an indicator of reliability. Consider a real-life example: History is rife with failed doomsday predictions from religious leaders and others who predicted with confidence the date of the end times.<sup>1</sup> These predictions were falsifiable because one could simply wait to

<sup>&</sup>lt;sup>1</sup> See Encyclopedia Britannica, 10 Failed Doomsday Predictions, https://www.britannica.com/list/10-failed-doomsday-predictions (last visited July 13, 2022).

see if the world ended on the predicted date. Often, the prognosticators relied on what they claimed were rigorous methods, such as astrology or esoteric readings of the Bible. The falsifiability of the predictions, however, did not make those methods reliable. Testing showed they were not.

Accordingly, the Supreme Court did not refer to only hypothetical falsifiability when it described falsifiability as an indicium of reliability in *Daubert*. Rather, it explained that a scientific methodology "is based on generating hypotheses and testing them to see if they can be falsified," and so a "key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested." Daubert, 509 U.S. at 593 (emphasis added). See also Nease v. Ford Motor Co., 848 F.3d 219, 232 (4th Cir. 2017) (holding that court erred in admitting expert testimony because, although expert had a plausible hypothesis for car's mechanical failure, expert had not tested that hypothesis). Maybe Baloga or the FBI conducted tests to determine the error rate of their fiber-analysis process, but the government did not provide any evidence of such testing to the district court. The falsifiability of Baloga's methods is meaningless without some indication of further testing.

The district court's only other, and primary, reason for finding Baloga's opinions reliable was that similar fiber evidence has been admitted in other cases. The lead opinion and the government also adopt this position. I disagree that any of the fiber-evidence cases presented by the government or cited in the lead opinion are evidence of Baloga's reliability. I see nothing in those decisions to suggest that the expert in

each case applied the same five-step method used by Baloga.<sup>2</sup> And court rulings on the reliability of *other* experts, who may or may not have applied the same methods, do not establish the reliability of Baloga's analysis. Even when the *same* witness has been qualified as an expert in prior cases, we have warned courts not to assume the reliability of that witness's testimony in a new case. *See United States v. Godinez*, 7 F.4th 628, 637–38 (7th Cir. 2021) (court erred by concluding that witness's qualification as expert in prior case weighed toward reliability when prior case did not include challenge to expert's methods).

The lead opinion relies on a 2009 report from the National Academy of Sciences as an additional ground for finding that the relevant scientific community generally accepts fiber evidence. See Nat'l Research Council, Strengthening FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD 162-63 (2009). This report is not the slam dunk the lead opinion suggests. The report actually highlights the lack of research determining the error rate of certain fiber-comparison methods. And rather than suggesting that Baloga's five-step method is a "standardized procedure" used by all fiber-evidence technicians, the report notes that a variety of methods are used. The lead opinion is correct that the report states that fiber analysis can be used to associate a given fiber with a class of fibers; that is, whether two fibers came from the same broad type of fabric. *Id.* at 161. The report further clarifies, however, that "none of the[] characteristics [identified during fiber

<sup>&</sup>lt;sup>2</sup> See United States v. Santiago Santiago, 156 F. Supp. 2d 145, 152 (D.P.R. 2001), United States v. Barnes, 481 F. App'x 505, 514 (11th Cir. 2012), United States v. Lujan, No. CR 05-0924 RB, 2011 WL 13210238, at \*4 (D.N.M. July 14, 2011), and State v. Fukusaku, 946 P.2d 32, 44 (Haw. 1997).

analysis] is suitable for individualizing fibers (associating a fiber from a crime scene with one, and only one, source)." *Id.* To Baloga's credit, she did not explicitly state that any two fibers "matched" or claim to predict the likelihood that they came from a common source with any statistical precision. But she implied as much by repeatedly insisting during her testimony that one would not expect two random fibers to have all the common characteristics that she identified.

The lead opinion's reliance on the 2009 report—as well as its reliance on other authorities that predate that report—also overlooks the sea change that has occurred in forensic science over the last decade. The 2009 report was the first in a series of federal studies on the use of forensic science in criminal investigations. It revealed systemic problems plaguing the forensic science community and led to a series of reform initiatives and further review of how forensic evidence is used. See President's Council of Advisors on Sci. and Tech., FORENSIC SCIENCE IN CRIMINAL COURTS: ENSURING SCIENTIFIC Validity of Feature-Comparison Methods, 34–35, §§ 2.7 and 2.8 (2016) (describing 2009 report's impact). Hair and fiber evidence came under particular scrutiny. To be clear, Baloga did not testify about hair; she conducted both fiberand hair-comparison analysis for her report, but the government decided to present only the fiber analysis at trial. Nonetheless, Baloga's report suggests that her methods for fiber and hair analysis are similar, with at least some overlapping steps. The government likewise conflates fiber and hair analysis in its appellate brief, suggesting that the government also sees these fields as interrelated. Studies about both types of evidence are thus relevant to my analysis.

A 2015 review of the use of forensic evidence by the FBI and the Department of Justice concluded that forensic experts had overstated the strength of forensic hair matches in more than 95 percent of cases.<sup>3</sup> This revelation was followed by a 2016 report from the President's Council of Advisors on Science and Technology, which dug deeper into the history of hair analysis and concluded that the DOJ's foundational studies on hair comparison were flawed. *See* FORENSIC SCIENCE IN CRIMINAL COURTS, 118, § 5.7. Public concern about potentially unreliable forensic evidence has only grown since then, garnering significant media coverage.<sup>4</sup>

The disintegrating consensus around hair and fiber evidence further highlights the problem with the district court's assumption that Baloga's opinions are reliable because similar experts have testified in other cases. Science, by its nature, is always evolving. Forensic testimony that seemed reliable at one time may later be shown to have been founded in speculation. Courts do the parties a disfavor when they assume that an expert is reliable merely because her testimony seems superficially similar to testimony admitted in the past. *See* FORENSIC SCIENCE IN CRIMINAL COURTS, 143–44 § 9.2

<sup>&</sup>lt;sup>3</sup> See Press Release, Federal Bureau of Investigation, FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review, (Apr. 20, 2015), https://www.fbi.gov/news/press-releases/press-releases/fbi-testimony-on-microscopic-hair-analysis-contained-errors-in-at-least-90-percent-of-cases-in-ongoing-review.

<sup>&</sup>lt;sup>4</sup> See Forensic Hair Analysis: A Curated Collection of Links, The Marshall Project, https://www.themarshallproject.org/records/1234-forensic-hair-analysis (last visited July 13, 2022) (collecting articles from various publications).

(describing how an overreliance on past precedent has led courts to erroneously assume that various forensic methods are reliable). The cost of such assumptions can be high: According to statistics compiled by The National Registry of Exonerations at Michigan Law School, about a quarter of all exonerations involve false or misleading forensic evidence as a contributing factor for the wrongful conviction.<sup>5</sup>

I agree with the lead opinion that district courts have broad discretion in how they determine the reliability of scientific testimony. And I reiterate that *Daubert* does not impose a checklist; the absence of any one *Daubert* factor does not necessarily make evidence unreliable. *United States v. Smith*, 215 F.3d 713, 720 (7th Cir. 2000). But here, not merely one of *Daub*ert's factors for assessing reliability was missing—all were. I am not suggesting that fiber evidence is inadmissible in all cases, nor do I claim to predict whether the government could establish that such evidence is reliable in a future case under the proper standard. Perhaps the lead opinion is right that the scientific community would still rally around the methods employed by Baloga and similar experts. But the government did not make that showing in the district court. And on that basis, the district court abused its discretion by admitting Baloga's testimony.

I nonetheless join the lead opinion in affirming Protho's conviction because, as the lead opinion has aptly explained, the evidence against Protho was overwhelming. An error at trial is harmless when it appears "beyond a reasonable doubt

<sup>&</sup>lt;sup>5</sup> See % Exonerations by Contributing Factor, The National Registry of Exonerations, https://www.law.umich.edu/special/exoneration/Pages/ExonerationsContribFactorsByCrime.aspx (last visited July 13, 2022).

that the error complained of did not contribute to the verdict obtained." *United States v. Parker*, 11 F.4th 593, 596 (7th Cir. 2021) (quoting *Mitchell v. Esparza*, 540 U.S. 12, 17–18 (2003)). Because the government introduced video and testimonial evidence identifying Protho as the perpetrator and establishing that Amani was inside Protho's car, the fiber evidence ended up being a relatively small part of the government's case. Its exclusion would not have made the government's case significantly less persuasive in the mind of the average juror. *See id.* (citing *United States v. Stewart*, 902 F.3d 664, 683 (7th Cir. 2018)).