FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

ALAN G. GIMENEZ,

Petitioner-Appellant,

v.

J.T. OCHOA, Warden; KAMALA D. HARRIS, Attorney General, Respondents-Appellees. No. 14-55681

D.C. No. 3:12-cv-01137-LAB-BLM

OPINION

Appeal from the United States District Court for the Southern District of California Larry A. Burns, District Judge, Presiding

Argued and Submitted October 22, 2015—Pasadena, California

Filed May 9, 2016

Before: Alex Kozinski, Sandra S. Ikuta and John B. Owens, Circuit Judges.

Opinion by Judge Kozinski

SUMMARY*

Habeas Corpus

The panel affirmed the district court's dismissal of Alan Gimenez's second habeas corpus petition challenging his conviction for the second degree murder of his infant daughter based on the prosecution's theory that his daughter was a victim of shaken baby syndrome.

The panel held that Gimenez's ineffective assistance of counsel claim, which concerns errors primarily related to the use of expert testimony, is barred as successive because his arguments don't present a claim for relief that is distinct from the claim raised in his first petition.

The panel held that Gimenez can't obtain relief under 28 U.S.C. § 2244(b)(2)(B)(ii) on the theory that the prosecution introduced false testimony by incorrectly interpreting key hospital records in violation of his due process rights, where Gimenez simply presents a battle between experts who have different opinions about how his daughter died. The panel held that the district court properly found that he didn't demonstrate the requisite "constitutional error" under § 2244(b)(2)(B)(ii).

Gimenez also argued that new scientific evidence undermines the prosecution's theory that his daughter was a victim of shaken baby syndrome and thus shows that he's actually innocent of her murder. The panel held that habeas

^{*} This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

petitioners can allege a constitutional violation from the introduction of flawed expert testimony at trial if they show that the introduction of this evidence undermined the fundamental fairness of the entire trial. The panel concluded that Gimenez isn't entitled to relief. The panel explained that Gimenez failed to show that permitting the prosecution's experts to testify based on a triad-only theory of shaken baby syndrome was so extremely unfair that it violated fundamental conceptions of justice, and that he presented literature revealing not so much a repudiation of triad-only shaken baby syndrome, but a vigorous debate about its validity within the scientific community.

The panel wrote that Gimenez could not obtain relief if the panel were to decouple his claim of actual innocence from any due process violation and repackage it as a freestanding "actual innocence" claim. The panel noted that this court has only assumed, but not held, that petitioners may bring such a freestanding innocence claim. The panel explained that Gimenez's "new" evidence doesn't undermine the prosecution's case so much as beef up the theory that the jury already rejected: that his daughter suffered from health problems at birth that caused her subdural hematoma, brain swelling, retinal hemorrhage and eventually her death.

COUNSEL

George L. Schraer (argued), San Diego, California, for Petitioner-Appellant.

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OPINION

KOZINSKI, Circuit Judge:

Two decades after being convicted of murdering his infant daughter, Alan Gimenez seeks federal habeas relief for the second time. We consider whether Gimenez's ineffective assistance of counsel claims are barred as successive. We also consider whether he may advance a due process claim on the ground that expert evidence presented at trial has been undermined by subsequent scientific developments.

I. Background

A. Medical History

Gimenez's daughter, Priscilla, was seven weeks old when she died. During her short life, she vomited on multiple occasions after being fed. She also had seizures. On one occasion when Gimenez was at home alone with Priscilla, he saw her shaking and having difficulty breathing. Gimenez performed CPR and called 911. Paramedics took Priscilla to the hospital, where she stayed for three days; she was diagnosed with epilepsy.

Hours after Priscilla was discharged, Gimenez's wife, Teresa, left for work and Gimenez fed Priscilla. Almost immediately, Priscilla vomited forcefully and experienced another seizure. Gimenez administered medicine as he was instructed by Priscilla's doctors and called Teresa. The couple rushed back to the hospital with Priscilla, where they remained for three days until her death. Gimenez was charged with her murder.

B. Trial

Gimenez and the government offered competing narratives at trial. The prosecution theorized that Gimenez had caused Priscilla's death by forcefully shaking her on at least two occasions. The defense argued that Priscilla was a sickly baby with birth injuries that worsened over time and eventually killed her.

Prosecution witnesses testified that Priscilla experienced a fairly normal birth, did not have a misshapen head, fed well and displayed normal vital signs in the days after she was born. Pediatrician Dr. Gooding testified that she discovered a suspicious fresh tear of Priscilla's frenulum¹ when she examined Priscilla upon her first hospital visit. Dr. Gooding commented that the injury usually results from "fairly vigorous trauma to the oral cavity." At the hospital, Gimenez accused an emergency-room doctor of tearing Priscilla's frenulum during an examination, but at trial he testified that

¹ The frenulum is the tissue underneath the tongue that anchors it to the mouth.

he'd inadvertently caused the injury while cleaning Priscilla's mouth. The jury also heard that Gimenez accused Teresa of infidelity, slapped her and pushed her during an argument late in her pregnancy, causing her to fall.

Experts provided the linchpin for the prosecution's theory that Priscilla was a victim of shaken baby syndrome (SBS). Radiologist Dr. Hilton analyzed x-rays of Priscilla's ribs and concluded that she was born without any bone damage but had a rib fracture at the time of her death. Coroner Dr. Eisele estimated that the rib fracture was about two weeks old when Priscilla died. He also testified that Priscilla had a subdural hematoma, or hemorrhage between the lining of her skull and the surface of the brain. Dr. Eisele also observed hemorrhaging in Priscilla's retinas and that her brain was "severely swollen." He concluded that Priscilla had been shaken.

Pediatrician Dr. Alexander testified that the hallmarks of SBS include subdural hematoma, brain swelling and retinal hemorrhage. He also noted that rib fractures are extremely uncommon in infants. He attributed Priscilla's two hospital admissions to separate shaking episodes.

Gimenez's experts countered with evidence that Priscilla was born with serious ailments that ultimately caused her death. Obstetrician Dr. Kerley testified that Teresa needed a C-section because she was in labor for more than 24 hours without achieving full dilation. He opined that the prolonged pressure of the narrow pelvic canal on Priscilla's skull may have caused molding or deformation of Priscilla's head.

Forensic pathologist Dr. Guard concluded that Teresa's strenuous labor caused Priscilla's subdural hemorrhage,

pointing to doctors' notes from the delivery room documenting molding in Priscilla's head. He explained that Priscilla's hemorrhage likely clotted, healed and re-bled in an uncontrollable "chain reaction" in the weeks following her birth, causing brain swelling and retinal hemorrhages. He explained that Priscilla's vomiting and seizures were an expected outward manifestation of re-bleeding as her brain healed. Finally, Dr. Guard attributed Priscilla's broken rib to physicians grasping her firmly while lifting her from the uterus during the C-section.

Neurologist Dr. Tiznado-Garcia analyzed Priscilla's hospital records and CT scans and concluded that she died from complications caused by a brain bleed that began at birth. Dr. Tiznado-Garcia ruled out SBS as a cause, explaining that brain bleeds caused by shaking are acute, while Priscilla's was chronic. Radiologist Dr. Harvey, however, conceded on cross-examination that Priscilla's injuries were consistent with non-accidental trauma.

The jury found Gimenez guilty of murder in the second degree. He was sentenced to an indeterminate prison term of fifteen years to life.

C. Previous Habeas Proceedings

In his first federal habeas petition, Gimenez alleged that his trial counsel was ineffective for failing to gather Priscilla's entire medical record. The missing documents suggested that Priscilla suffered from a congenital blood disorder with effects that mimic those of SBS. He also claimed that his counsel was ineffective by failing to consult a hematologist or question the experts he did retain about whether Priscilla had a blood disorder.

The district court determined that Gimenez suffered no prejudice from any deficient use of expert testimony or failure to obtain medical records: The prosecution's case would have been just as strong, and the evidence wouldn't have enabled the defense to overcome Gimenez's credibility problems. We affirmed in a memorandum disposition. *Gimenez* v. *Alameida*, 135 F. App'x 20 (9th Cir. 2005).

In 2009, Gimenez filed a habeas petition in the Superior Court of California nearly identical to the federal petition at the heart of this case, which the California courts denied. Gimenez then filed a second federal habeas petition with this court's permission. The district court granted the state's motion to dismiss, which Gimenez appeals.

II. Discussion

Gimenez's second federal habeas petition presents three grounds for relief: (1) his counsel rendered ineffective assistance; (2) he was convicted based on false expert testimony; and (3) his due process rights were violated when he was convicted based on flawed scientific evidence even though he was innocent. Gimenez must clear the high hurdles erected by 28 U.S.C. § 2244(b) for obtaining relief on any of these grounds.

A. Ineffective Assistance Claim

Gimenez's ineffective assistance claim concerns errors primarily related to the use of expert testimony.² We must

² Specifically, Gimenez claims that his attorney rendered deficient performance eight ways by: (1) hiring an incompetent pathologist, Dr. Guard, to testify that Priscilla suffered from a recurring brain bleed that

dismiss this claim if it is identical to the one raised in his first habeas petition—that is, if the two share the same "legal basis for granting . . . relief." *Sanders* v. *United States*, 373 U.S. 1, 14–16 (1963); *see* 28 U.S.C. § 2244(b)(1).

The standard for "distinguishing repetitious claims from new ones is the 'substantial similarity' rule" used to determine whether a claim has been exhausted in state court. See Randy Hertz & James S. Liebman, 2 Federal Habeas Corpus Practice & Procedure § 28.1 n.8 (6th ed. 2011). Under the exhaustion test, a petitioner can introduce additional facts to support a claim on federal habeas review so long as he presented the "substance" of the claim to the state courts. Vasquez v. Hillery, 474 U.S. 254, 257–58 (1986). That the additional facts provide more sophisticated or reliable support is of no moment where the information does not "fundamentally alter the legal claim already considered." Id. at 260. A claim in a successive petition is barred when its "basic thrust or gravamen" is the same as a claim that's already been raised, even if it's supported by new factual allegations or legal arguments. Babbitt v. Woodford, 177 F.3d 744, 746 (9th Cir. 1999) (quoting *United States* v.

began at birth; (2) failing to call a radiologist to testify that Priscilla's rib fracture appeared at birth and that her brain bleed began before her final hospital stay; (3) hiring radiologist Dr. Harvey, who admitted that Priscilla's brain bleeds were consistent with an SBS theory; (4) suffering neurologist Dr. Tiznado-Garcia to testify that Priscilla's CT scans revealed an older, recurring brain bleed instead of employing a radiologist to do so; (5) not relying on experts more qualified than Dr. Guard and Dr. Tiznado-Garcia to present the alternate theory of Priscilla's death; (6) failing to subpoena Priscilla's complete medical records and provide them to defense experts; (7) failing to better prepare Dr. Kerley to testify that Priscilla's head underwent "molding"; and (8) not bolstering the alternative theory of Priscilla's death with available medical records.

Allen, 157 F.3d 661, 664 (9th Cir. 1998)); accord Gulbrandson v. Ryan, 738 F.3d 976, 997 (9th Cir. 2013).

Our cases characterize ineffective assistance "claims" at a fairly high level of generality. In *West* v. *Ryan*, we equated an allegation that counsel failed to present mitigation evidence with an allegation that counsel failed to invalidate petitioner's aggravating factors by presenting the same evidence. 652 F.3d 1071, 1077 (9th Cir. 2011). And in *Cooper* v. *Brown*, an ineffective assistance claim based on counsel's failure to introduce photographs of hair was barred where the district court already considered counsel's deficiencies in utilizing forensic evidence. 510 F.3d 870, 874, 930–31 (9th Cir. 2007).

Gimenez essentially concedes that he previously raised at least one argument: Trial counsel was ineffective for "failing to subpoena all of Priscilla's medical records and provide them to the defense's expert witnesses." Gimenez maintained in his first petition that his case would have been stronger if trial counsel had reviewed, "with the assistance of appropriate medical experts, all medical records." It makes no difference that Gimenez may now have additional documents supporting his argument that counsel was deficient in failing to locate all of Priscilla's records. The "basic thrust or gravamen" is the same. *Gulbrandson*, 738 F.3d at 997; *see also Cooper*, 510 F.3d at 931.

Nor can Gimenez succeed by faulting his counsel for failing to *use* all available medical evidence. Any criticism of counsel's failure to obtain complete records would be meaningless if counsel weren't expected to employ favorable undiscovered evidence in support of his case. These

arguments are "two sides of the same coin." West, 652 F.3d at 1077.

Gimenez's six remaining arguments echo the same grounds for relief he presented to the district court in his first habeas petition: Counsel should have used better experts. In disposing of his first petition, the district court considered whether trial counsel was deficient for failing to consult the proper experts to "present a different, more effective defense." This time around, Gimenez explains in more detail why different experts would have improved his case. But a federal court already denied relief after considering whether Gimenez suffered prejudice from the failure to present adequate expert evidence in support of the defense's theory of the case. Because the impact of counsel's deficiencies in utilizing experts "has already been adjudicated," Gimenez's new arguments don't present a distinct claim for relief. *Cooper*, 510 F.3d at 988.

B. Due Process Challenge Based on False Testimony

Gimenez argues that the prosecution's experts incorrectly interpreted key hospital records and thus offered false testimony at trial, violating his due process rights. Accordingly, Gimenez claims that he alleged the requisite constitutional error that would entitle him to proceed on his claim under 28 U.S.C. § 2244(b)(2)(B)(ii). That section permits relief to petitioners who can show by "clear and convincing evidence that, but for constitutional error, no reasonable factfinder would have found [them] guilty."

To dismiss a second or successive petition, a district court must determine that the record "conclusively shows" that the petitioner failed to meet section 2244's requirements. *United*

States v. Villa-Gonzalez, 208 F.3d 1160, 1164–65 (9th Cir. 2000). After conducting a thorough review of Gimenez's new petition, the district court properly found that he didn't demonstrate "constitutional error" under section 2244(b)(2)(B)(ii) from the introduction of false testimony. Gimenez presents affidavits from new experts that either repeat testimony from his trial experts or fail to contradict the prosecution's theory.³ To the extent that this new testimony

First, Gimenez claims that the prosecution's experts erroneously determined that Priscilla's brain bleeds occurred just before her death. New experts Dr. Wolfe and Dr. Plunkett provide affidavits concluding—just like Dr. Tiznado-Garcia did at trial—that Priscilla's brain bleed was chronic and began soon after her birth. Second, Gimenez presents affidavits from multiple experts who conclude that Priscilla had a blood clot that formed before her death—just like Dr. Tiznado-Garcia testified at trial. Third, Gimenez presents affidavits from two experts who believe that Priscilla's retinal hemorrhages were no more than 72 hours old. Thus, they may have formed during her final hospital stay from August 10 to August 13—not as a result of any shaking incidents when she was alone with Gimenez on August 10. This evidence is consistent with the prosecution's theory that Priscilla was violently shaken on the afternoon she returned to the hospital—three days before her death. Fourth, Gimenez claims that two new experts conclude that Priscilla suffered from a blood coagulation disorder which led to her death. However, one of the experts notes that "head trauma in and of itself" may result in abnormal coagulation patterns, "rendering it virtually impossible" to determine which came first, as "appears to be the case [here]." And the other expert found "no medical records to indicate" blood disorders. These findings are also consistent with the prosecution's theory of the case. Fifth, Gimenez introduces an affidavit from a radiologist who concludes, based on an x-ray taken immediately after Priscilla's birth, that she likely had a rib fracture at that time. This testimony supports that of defense expert Dr. Guard, who testified that doctors likely broke Priscilla's rib by accident during her birth. Sixth, Gimenez points to additional medical records documenting Priscilla's head "molding" during her traumatic birth. This merely amplifies the testimony of defense experts Dr. Kerley and Dr. Guard at trial. Finally, Gimenez points to a

contradicts the prosecution's expert testimony, it's simply a difference in opinion—not false testimony. See, e.g., United States v. Workinger, 90 F.3d 1409, 1416 (9th Cir. 1996); Harris v. Vasquez, 949 F.2d 1497, 1524 (9th Cir. 1991) (as amended); cf. Sistrunk v. Armenakis, 292 F.3d 669, 675 & n.7 (9th Cir. 2002) (en banc) (overstating the conclusions of a study was not a lie). We have found due process violations from the introduction of false testimony only where a fact witness told lies (even unknowingly so) or the prosecution relied on phony documents. See, e.g., Phillips v. Ornoski, 673 F.3d 1168, 1183–86 (9th Cir. 2012); Maxwell v. Roe, 628 F.3d 486, 506 (9th Cir. 2010); Hall v. Dir. of Corr., 343 F.3d 976, 981–85 (9th Cir. 2003). Neither is the case here.

Gimenez presents a battle between experts who have different opinions about how Priscilla died. Introducing expert testimony that is contradicted by other experts, whether at trial or at a later date, doesn't amount to suborning perjury or falsifying documents; it's standard litigation. Accordingly, Gimenez can't obtain relief under section 2244(b)(2)(B)(ii) on the theory that the prosecution introduced false testimony at trial.

C. Claims Based on Changes in Scientific Knowledge

Finally, Gimenez argues that new scientific evidence undermines the prosecution's theory that Priscilla was a

recent publication suggesting that patterns of hemorrhage from accidental trauma "may be the same as . . . or completely different from the pattern seen in [abusive head trauma]." That statement is not inconsistent with the prosecution's theory that the patterns of hemorrhage were attributable to SBS.

victim of SBS and thus shows that he's actually innocent of her murder. Gimenez claims that the prosecution's experts rested their SBS diagnosis on a triad of symptoms—subdural hematoma, brain swelling and retinal hemorrhage. He points to a number of articles supporting his claim that medical knowledge surrounding SBS has changed in the years since his conviction. In his view, no longer do forensic pathologists diagnose SBS simply by noting the presence of the telltale triad of injuries. Now, the medical community requires evidence of impact injuries before diagnosing SBS. Because Priscilla didn't exhibit head or neck injuries, Gimenez argues that she couldn't have been the victim of SBS.

Based on this new evidence, Gimenez argues that he's entitled to bring a claim under section 2244(b)(2)(B)(ii) and under caselaw permitting habeas relief for petitioners who are actually innocent of any crime.

1. Relief Under Section 2244(b)(2)(B)(ii)

Gimenez argues that if his new evidence is credited, "no reasonable factfinder" could have found him guilty. 28 U.S.C. § 2244(b)(2)(B)(ii). But section 2244(b)(2)(B)(ii) also requires petitioners to state a predicate "constitutional error." *See Case* v. *Hatch*, 731 F.3d 1015, 1032 (10th Cir. 2013); *In re Davis*, 565 F.3d 810, 823 (11th Cir. 2009). The Supreme Court has never recognized "actual innocence" as a constitutional error that would provide grounds for relief without an independent constitutional violation. *See Schlup* v. *Delo*, 513 U.S. 298, 315–16 (1995); *Herrera* v. *Collins*, 506 U.S. 390, 400 (1993).

Gimenez maintains that he did suffer the required predicate constitutional error: The prosecution deprived him of due process by introducing expert testimony about the discredited triad theory of SBS. The district court couldn't find any authority for the proposition that "a conviction based on the most up-to-date knowledge in the past transforms to a violation of due process when that knowledge is modified in ensuing years." But courts have long considered arguments that the introduction of faulty evidence violates a petitioner's due process right to a fundamentally fair trial—even if that evidence does not specifically qualify as "false testimony." See Estelle v. McGuire, 502 U.S. 62, 68–70 (1991); Dowling v. United States, 493 U.S. 342, 352–53 (1990); McKinney v. Rees, 993 F.2d 1378, 1385 (9th Cir. 1993); Kealohapauole v. Shimoda, 800 F.2d 1463, 1465–66 (9th Cir. 1986).

Nothing compels a different rule for a challenge brought in a successive petition to expert testimony about discredited forensic principles or other junk science. Indeed, recognizing such a claim is essential in an age where forensics that were once considered unassailable are subject to serious doubt.⁴

⁴ In 2009, the National Research Council submitted a comprehensive report to the U.S. Department of Justice critiquing the state of forensic science. *See* Committee on Identifying the Needs of the Forensic Sciences Community, National Research Council, *Strengthening Forensic Science in the United States: A Path Forward* 57 (2009), *available at* https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf ("In some cases, substantive information and testimony based on faulty forensic science analyses may have contributed to wrongful convictions of innocent people."). The popular press and legal academia have regularly reported research breakthroughs debunking or seriously undermining forensics disciplines once thought to be scientifically sound. *See, e.g.*, Brandon L. Garrett & Peter J. Neufeld, *Invalid Forensic Science Testimony & Wrongful Convictions*, 95 Va. L. Rev. 1 (2009) (reviewing trial records to determine the incidence of experts overstating the probative value of

And it's particularly important to permit claims of constitutional error grounded in faulty science in a second or successive petition. After all, flawed analytical methods may not be debunked until well after the expiration of a

various forensic disciplines); Jennifer L. Mnookin, The Validity of Latent Fingerprint Identification: Confessions of a Fingerprinting Moderate, 7 Law, Probability & Risk 127 (2008); Kelly Servick, Reversing the Legacy of Junk Science in the Courtroom, Science (Mar. 7, 2016), http://www.sciencemag.org/news/2016/03/reversing-legacy-junk-sciencecourtroom (hair analysis, bite mark analysis, fingerprint comparisons); NPR Staff, Arson Forensics Sets Old Fire Myths Ablaze, National Public Radio (Nov. 19, 2011), http://www.npr.org/2011/11/19/142546979/arsonforensics-sets-old-fire-myths-ablaze (arson and burn pattern analysis); John Solomon, FBI's Forensic Test Full of Holes, Wash. Post (Nov. 18, http://www.washingtonpost.com/wp-dyn/content/article/2007/ 11/17/AR2007111701681 pf.html (comparative bullet-lead analysis). Other sub-fields have been roundly criticized for relying on questionable methodology or for overstating the probative value of forensic analysis. Michael Hall, False Impressions, Tex. Monthly (Jan. http://www.texasmonthly.com/articles/false-impressions/ (bite mark analysis); Spencer S. Hsu, Va. Exoneration Underscores Mounting Challenges to Bite-Mark Evidence, Wash. Post (Apr. 8, 2016), https://www.washingtonpost.com/local/public-safety/va-exonerationunderscores-to-mounting-challenges-to-bite-mark-evidence/ 2016/04/08/55bbfe98-fd9a-11e5-886f-a037dba38301 story.html (reporting the exoneration of a sailor convicted of rape and murder based on bite-mark analysis); Spencer S. Hsu, FBI Admits Flaws in Hair Over Decades, Wash. Post (Apr. https://www.washingtonpost.com/local/crime/fbi-overstated-forensic-hairmatches-in-nearly-all-criminal-trials-for-decades/2015/04/18/39c8d8c6e515-11e4-b510-962fcfabc310_story.html?tid=a_inl ("The Justice Department and FBI have formally acknowledged that nearly every examiner in an elite FBI forensic unit gave flawed testimony in almost all trials in which they offered evidence [about hair matches] against criminal defendants over more than a two-decade period."); Adam Liptak, You Think DNA Evidence is Foolproof? Try Again, New York Times (Mar. 16, 2003), http://www.nytimes.com/2003/03/16/weekinreview/the-nation-youthink-dna-evidence-is-foolproof-try-again.html.

petitioner's one-year deadline to file a habeas petition under AEDPA.

The Third Circuit permits petitioners to seek relief from convictions based on flawed forensic evidence. In Albrecht v. Horn, the court suggested that a petitioner may claim that scientific evidence introduced at trial violated his due process rights if he could show that the evidence "infect[ed] his entire trial with error of constitutional dimensions." 485 F.3d 103, 124 n.7 (3d Cir. 2007) (quoting Murray v. Carrier, 477 U.S. 478, 494 (1986)). Such a petition for relief is not a "freestanding innocence claim," but a due process claim. Lee v. Houtzdale SCI, 798 F.3d 159, 162 (3d Cir. 2015) (interpreting Lee v. Glunt, 667 F.3d 397, 403 n.5 (3d Cir. 2012)). Relying on this rule, the Lee court granted habeas relief to a petitioner whose conviction rested on flawed arson forensics, which the government conceded had been rendered invalid by subsequent scientific developments. *Id.* at 167. remaining evidence at his trial wasn't sufficient to show that the petitioner was guilty beyond a reasonable doubt. Id. at 169.

We join the Third Circuit in recognizing that habeas petitioners can allege a constitutional violation from the introduction of flawed expert testimony at trial if they show that the introduction of this evidence "undermined the fundamental fairness of the entire trial." *Id.* at 162. Yet Gimenez isn't entitled to relief. He failed to show that permitting the prosecution's experts to testify based on a triad-only theory of SBS was "so extremely unfair that it[]... violate[d] fundamental conceptions of justice." *Dowling*, 493 U.S. at 352 (internal quotation marks omitted). Gimenez presented literature revealing not so much a repudiation of triad-only SBS, but a vigorous debate about its validity within

the scientific community. In 2006, one textbook acknowledged that "there is a dispute of whether inflicted subdural hematomas can occur from shaking alone." In 2011, the triad theory of SBS was characterized merely as being under challenge. See Cavazos v. Smith, 132 S. Ct. 2, 10 (2011) (Ginsburg, J., dissenting) (commenting on the shift in scientific opinions about SBS). The debate continues to the present day. See Debbie Cenziper et al., Shaken Science: Prosecutors Build Murder Cases on Disputed Shaken Baby Syndrome Diagnosis, Wash. Post (Mar. 20, 2015), https://www.washingtonpost.com/graphics/investigations/s haken-baby-syndrome/.

In any case, Gimenez can't prove by "clear and convincing evidence" that "no reasonable factfinder" would have found him guilty but for the introduction of purportedly flawed SBS testimony. 28 U.S.C. § 2244(b)(2)(B)(ii); see Gage v. Chappell, 793 F.3d 1159, 1168 (9th Cir. 2015). That inquiry requires courts to examine the alleged constitutional violation "in light of the evidence as a whole" at a petitioner's trial. 28 U.S.C. § 2244(b)(2)(B)(ii); Jones v. Ryan, 733 F.3d 825, 845 (9th Cir. 2013). A juror could still have concluded that Priscilla was shaken to death based on her numerous suspicious injuries, Gimenez's inconsistent statements about Priscilla's torn frenulum and his admitted violent behavior. Even assuming the prosecution's experts couldn't testify that the triad alone establishes SBS, the evidence Gimenez presents isn't enough to show by clear and convincing evidence that "no reasonable factfinder" would have found him guilty. Jones, 733 F.3d at 845; Gage, 793 F.3d at 1168.

2. Freestanding Actual-Innocence Claim

Nor could Gimenez obtain relief if we were to decouple his claim of actual innocence from any due process violation and repackage it as a freestanding "actual innocence" claim. *See Herrera*, 506 U.S. at 417. For one, we have only assumed, but have not held, that petitioners may bring such a freestanding innocence claim. *Jones v. Taylor*, 763 F.3d 1242, 1246 (9th Cir. 2014). And our cases suggest that relief would be available, if at all, only in very narrow circumstances. Gimenez must "go beyond demonstrating doubt about his guilt, and must affirmatively prove that he is probably innocent." *Carriger v. Stewart*, 132 F.3d 463, 476 (9th Cir. 1997) (en banc).

Gimenez's "new" evidence doesn't undermine the prosecution's case so much as beef up the theory that the jury already rejected: Priscilla suffered from health problems at birth that caused her subdural hematoma, brain swelling, retinal hemorrhage and eventually her death. Introducing a superior version of the same evidence supporting the theory doesn't "affirmatively prove that [Gimenez] is probably innocent." *Id.* The evidence falls far short of a persuasive alibi, exculpatory physical evidence or a credible confession from another suspect—all of which are types of new evidence that we have suggested could meet this demanding standard. *Id.* at 477.

* * *

We acknowledge that AEDPA's requirements make it extremely difficult to reexamine convictions based on scientific theories that are presently in flux. But challenges to flawed expert testimony are cognizable in successive habeas petitions. While Gimenez may not meet the exacting prerequisites for obtaining relief from his conviction, he and others may be able to do so in the future as forensic science continues to evolve.

AFFIRMED.