**IN THE SUPREME COURT OF CALIFORNIA**

THE PEOPLE,

Plaintiff and Respondent,

v.

SANDI DAWN NIEVES,

Defendant and Appellant.

S092410

Los Angeles County Superior Court

PA030589-01

May 3, 2021

Chief Justice Cantil-Sakauye authored the opinion of the Court, in which Justices Corrigan, Liu, Cuéllar, Kruger, Groban and Jenkins concurred.

PEOPLE v. NIEVES

S092410

Opinion of the Court by Cantil-Sakauye, C. J.

A jury convicted Sandi Dawn Nieves of the first degree murder of her daughters Nikolet Amber Nieves, Rashel Hollie Nieves, Kristl Dawn Folden, and Jaqlene Marie Folden (Pen. Code, § 187),[[1]](#footnote-2) attempted murder of her son, F.D. (§§ 664, 187), and arson (§ 451, subd. (b)). The jury found true the special circumstance allegations that defendant committed multiple murders, and that each murder was committed while lying in wait and while engaged in the crime of arson. (§ 190.2, subds. (a)(3), (a)(15), (a)(17).) Following the penalty phase of trial, the jury returned a verdict of death. The trial court denied defendant’s motion to modify the death penalty verdict and her motion for a new trial (§ 190.4, subd. (e)) and sentenced her to death. This appeal is automatic.

We affirm Nieves’s convictions but reverse her death sentence due to the trial court’s misconduct.

# Background

## A. Guilt Phase Evidence

Defendant called 911 to report a fire at her home in early July 1998. When paramedics arrived, the fire had been out for some time and defendant was covered in soot and sitting in the living room with her 14-year-old son F.D. Defendant’s four daughters, ages 12, 11, 7, and 5, were lying on sleeping bags on the kitchen floor and had all died of smoke inhalation. The oven was open with burned items inside and gasoline had been poured and lit in the hallway and bedrooms.

### 1. Relevant relationships

The father of F.D. and defendant’s two older daughters was her first husband Fernando Nieves.[[2]](#footnote-3) Defendant had two daughters with her second husband, David Folden, who eventually adopted her three older children. Some years later, as defendant was divorcing Folden, she had an affair with Fernando. When he ended the affair, defendant sent Fernando her will and life insurance policies and told him she wanted him to have custody of all the children if she died. Later, unhappy about the end of the affair, she sent an angry letter telling Fernando he could no longer have contact with her or the children.

Defendant began seeing Scott Volk several months before the crime. They dated briefly before Volk ended the relationship. Upset over the breakup, defendant threatened to commit suicide; she sent the children to stay with their fathers and wrote a suicide note but did not end her life. When she faced eviction for unpaid rent, defendant moved to the town where Volk lived and they eventually resumed a relationship. Volk broke up with defendant again after learning she was pregnant.

### 2. Events surrounding the fire

Defendant had an abortion on a Thursday the week before the fire. She told Volk’s mother that abortion had been out of the question until she began to think of suicide as a solution to her circumstances. The weekend after the abortion, attorneys served defendant with notice that Folden intended to revoke his adoption and child support for her three older children. When Fernando spoke to defendant afterward, she was “furious” at the prospect of losing child support.

Defendant sent a note to Folden that was postmarked on the day of the fire. She wrote: “Now you don’t have to support any of us! FUCK YOU you are scum!” In a letter to Volk that he received a few days after the fire, defendant wrote: “I was always here for you — you just couldn’t see it. Now you never will. [¶] I can’t live without you in my life . . . I have nothing left you took it all[.]”

 Defendant’s son F.D. testified that on the night of the fire defendant declared they would have a “slumber party” in the kitchen. F.D. did not want to sleep in the kitchen but defendant insisted. Sometime in the night during the fire, defendant shook F.D. and his sisters to wake them up. She told them to breathe into their pillows and stay where they were because the fire could be coming from outside. F.D. lost consciousness, but later got up and could see his mother and sisters lying on the floor. He lay down again and when he awoke it was light outside and his mother was up but did not answer when he asked what had happened.

### 3. Defense case

Defendant’s friends testified that defendant was active in the Mormon Church and was a caring and devoted mother. Defendant was very depressed after her abortion and regretted it. Those who spoke to defendant just before the fire said she was upset about recent events but had plans for the immediate future and did not seem to be thinking about suicide.

When defendant testified, the prosecutor asked about her interview with a defense expert, whose notes showed that defendant reported writing letters to Folden and Volk the night of the fire and going to the post office to mail them at approximately 1:00 a.m. When testifying, defendant said she did not remember writing and mailing the letters or telling the expert about it. She claimed that she lay down near her children to warm her feet on the oven, woke up with no idea where the fire was coming from, and did not remember anything else about the night of the fire. She thought she dreamed about holding a lighter and seeing flames, but when she saw scorched hair on the back of her hand she realized it was not a dream.

Defendant said she had been hysterical about having an abortion; subsequently, she started taking phentermine, a diet medication, and the antidepressant Zoloft. A toxicology report after the fire confirmed that defendant had phentermine in her system but no screen had been done for Zoloft.

The experts who testified for the defense included two psychiatrists, Dr. Philip Ney and Dr. Gordon Plotkin, and a neuropsychologist, Dr. Lorie Humphrey.

Dr. Ney testified that a combination of Zoloft and phentermine could cause serotonin syndrome, a condition capable of triggering seizures. Defendant’s descriptions of the night of the fire, and history of seizures in early childhood, were consistent with having had a seizure. Dr. Ney explained that a seizure could have induced a dissociative state, which would cause a person to be “basically unconscious” even while engaged in complex behaviors.

Dr. Plotkin confirmed that Zoloft and phentermine could trigger serotonin syndrome and seizures and result in delirium that might cause a person to do “unusual” things. On cross-examination, Dr. Plotkin conceded that actions such as writing letters and driving to the post office were not consistent with delirium. He testified that a seizure or serotonin syndrome would not cause dissociation, as Dr. Ney had claimed.

Dr. Humphrey administered neuropsychological tests to assess defendant for brain damage. Results showed some impairment that made it harder for defendant to function under stress, rendered her more impulsive, and affected her memory.

### 4. Rebuttal

A psychiatrist testifying for the prosecution disputed Dr. Ney’s testimony that defendant was in a dissociative state on the night of the fire: there was too much she remembered; her memory was selective; and the diagnosis was inconsistent from one examiner to another. Prosecution experts also included a neurologist and a medical toxicologist, who found no evidence that defendant experienced serotonin syndrome, a seizure, or any type of unconscious state at the time of the fire. Two experts on psychological testing also disputed Dr. Humphrey’s conclusions. They found evidence that defendant tried to manipulate the psychological testing and identified mistakes and omissions throughout Dr. Humphrey’s report.

## B. Penalty Phase Evidence

### 1. Prosecution case

 Fernando Nieves, his wife Charlotte Nieves, and his mother Minerva Serna gave victim impact statements on the deaths of the children and the funeral. Fernando also recounted how, within a month of the crimes, defendant tried to have F.D. removed from Fernando’s custody and sent to live with a maternal relative in Indiana whom F.D. had never met. Serna expressed her belief during cross-examination that defendant was “vicious and malicious” in the way she had tried to break up Fernando’s relationships and keep him from seeing his children.

 David Folden described coping with his daughters’ deaths and his resentment at defendant’s efforts to turn her older children against him. He felt that one thing F.D. gained from the deaths of his sisters was freedom — his mother had been so controlling she would not even let the children play in the front yard.

 In addition to victim impact testimony, the prosecution showed a video of defendant’s children playing in various settings and displayed poster boards mounted with photographs of the victims engaged in activities with family members.

### 2. Defense case

 The defense presented one expert witness, Dr. Robert Suiter, who evaluated defendant and Folden during their divorce proceedings. He explained his recommendation from that time, approximately a year before the crime, that defendant was best suited to have custody of the children.

Character witnesses included a number of defendant’s friends, defendant’s maternal aunt, stepfather, and a bishop from defendant’s church. They described defendant’s mother as verbally and physically abusive during defendant’s childhood and noted that defendant had experienced previous periods of severe depression. Defendant’s life revolved around her children and she was an active and loving mother. The witnesses believed defendant could not have been in her right mind if she killed her children; they concluded she must have been very depressed and viewed her as a “good mother who lost touch with reality.”

 A chaplain from the county jail testified concerning defendant’s remorse and her desire to repair her relationship with her son.

### 3. Rebuttal

The prosecution introduced a letter to defendant from one of her daughters who threatened to run away and expressed feeling ignored and unloved. Testimony from a neighbor and staff from the victims’ school characterized defendant as a controlling, overbearing, and manipulative parent whose children seemed to fear her. Neighbors who knew defendant and Folden during their divorce concluded that defendant lied about the relationship and tried to turn her children against Folden. Defendant seemed extremely angry, especially regarding Folden.

# Discussion

## A. Jury Selection

 Defendant contends the trial court erred by conducting voir dire that was inadequate to reveal prospective jurors’ disqualifying attitudes about the death penalty in violation of her Fifth, Sixth, Eighth, and Fourteenth Amendment rights. Specifically, defendant claims the jury questionnaire was deficient because it omitted defense questions about the impact that evidence concerning young victims would have on prospective jurors’ decisionmaking, and it used questions that were too confusing to elicit meaningful information about prospective jurors’ views. Defendant also contends the trial court’s “rushed” voir dire and restrictions on defense questioning was inadequate to inform defendant’s exercise of challenges for cause and use of peremptory challenges. We find no merit to these claims.

### 1. Background

 The trial court prepared a jury questionnaire that incorporated proposals from defense and prosecution drafts. The defense proposed amendments to the court’s draft questionnaire, addressing case-specific issues such as the impact of unpleasant photographs and defendant’s abortion. The defense also requested additional questions about whether a crime involving four young victims would cause prospective jurors to vote for the death penalty regardless of mitigating evidence. The trial court incorporated most of the defense amendments but rejected additional questions about the age of the victims, which was instead referenced in a preamble to questions about the death penalty.

 The trial court rejected a defense motion to include two revised questions referencing the age of the victims but agreed to defense counsel’s alternate request to have bolded references to the victims’ ages appear in close proximity to particular questions. The defense then expressed agreement with two bolded references to the victims’ ages and their location in the questionnaire.

 The final jury questionnaire contained eleven death penalty questions. Question Nos. 60 to 63 asked if prospective jurors felt the death penalty was used too much or too little, had changed their view on the death penalty over the years, or belonged to groups that advocated increased use or abolition of the death penalty. After question No. 63, the questionnaire explained the guilt and penalty phases of a capital trial, informed prospective jurors concerning the special circumstances defendant faced, and explained the jury’s responsibility to determine the penalty. The guidance concluded in bolded print set apart from the preceding paragraph: “**Also assume for the purposes of questions 64–67, that the evidence may tend to show that the four deceased victims were the children of the defendant and ranged in age from age five to age twelve.”**

 Question Nos. 64 to 66 asked whether prospective jurors would, because of their views on capital punishment, refuse to find the defendant guilty of first degree murder or special circumstances to avoid deliberating on a penalty phase, or if they would automatically vote for life without parole without considering any aggravating or mitigating factors. Appearing a second time in bold print directly before question No. 67 was the instruction: “**Assume for purposes of question 67 that the evidence may tend to show that the four deceased victims were the children of the defendant and ranged in age from age five to age twelve**.”

Question No. 67 asked if prospective jurors would automatically vote for the death penalty: “Assume for the sake of this question only, that the jury has found the defendant guilty of first degree murder and has found one or more of the special circumstances true and that you are in the penalty phase. Would you, because of any views that you may have concerning capital punishment, automatically refuse to vote in favor of the penalty of life imprisonment without the possibility of parole and automatically vote for a penalty of death, without considering any of the evidence, or any of the aggravating and mitigating factors (on which you will be instructed) regarding the facts of the crime and the background and character of the defendant?”

 The remaining questions asked prospective jurors: whether those who would automatically vote for a particular penalty would change their approach if ordered by the court to consider and weigh the evidence and the aggravating and mitigating factors; whether they could set aside their feelings about what the law ought to be and follow the law as instructed by the court; and what they understood the meaning of life in prison without the possibility of parole to be.

 The jury questionnaire instructed prospective jurors to mark questions they did not understand with a question mark or by writing “I don’t understand” and informed them that the trial court and counsel would question them about any difficulties they had filling out the questionnaire. Before prospective jurors filled out the questionnaire, the trial court orally advised them to mark the questionnaire when they did not understand something or wanted to answer in a confidential manner, provided them a written summary of the charges, explained trial court procedures for death penalty cases in California and the jury’s role in determining the penalty, and verbally reiterated that the charges included the murder of children.

 For oral voir dire, the trial court required the parties to submit any proposed followup questions in writing, and the trial court then determined whether to include them in the oral examination. The court did not intend to question prospective jurors about their views on the death penalty when no basis for disqualification appeared in their questionnaires.

 The trial court identified for individual questioning prospective jurors whose questionnaire answers appeared facially disqualifying or raised questions about death qualification. Defense counsel identified additional prospective jurors for questioning based on their questionnaires. The trial court then individually questioned these prospective jurors in the jury box. The defense participated in questioning a majority of the prospective jurors, though there were some for whom the court completed questioning without defense input, and others the defense did not question, although offered an opportunity to do so.

During selection of the sitting jury, the trial court excused nine prospective jurors for cause based on their views about the death penalty, five who would always vote for the death penalty, and four who would always vote against it. The court also excused some prospective alternate jurors for cause, and no alternate jurors ultimately deliberated in defendant’s trial.[[3]](#footnote-4) The defense used 13 of its 20 peremptory challenges.

### 2. Analysis

 Prospective jurors are disqualified from serving on a capital jury when their views about capital punishment would prevent or substantially impair the performance of their duties in accordance with their instructions and oath. (*Wainwright v. Witt* (1985) 469 U.S. 412, 424 (*Witt*).) This standard does not require bias to be “ ‘unmistakably clear’ ” and is met when “the trial judge is left with the definite impression that a prospective juror would be unable to faithfully and impartially apply the law.” (*Id.* at pp. 425–426.) A trial court’s ruling in this regard is entitled to deference given its ability to consider demeanor, “a factor of critical importance in assessing the attitude and qualifications of potential jurors.” (*Uttecht v. Brown* (2007) 551 U.S. 1, 9.)

 Under the two-part inquiry of *Lockhart v. McCree* (1986) 476 U.S. 162, it is important to consider not only whether a prospective juror’s views on capital punishment would “generally lead to an automatic vote, one way or the other,” but also “the possibility that such a juror might be able to set aside those views and fairly consider both sentencing alternatives, as the law requires.” (*People v. Leon* (2015) 61 Cal.4th 569, 592 (*Leon*); see also *Lockhart*, at p. 176.) “A juror might find it very difficult to vote to impose the death penalty, and yet such a juror’s performance still would not be substantially impaired under *Witt*, unless he or she were unwilling or unable to follow the trial court’s instructions.” (*People v. Stewart* (2004) 33 Cal.4th 425, 447, italics omitted; *People v. Armstrong* (2019) 6 Cal.5th 735, 764.)

 To ensure meaningful and reliable death-qualifying voir dire, “both the [trial] court and counsel ‘must have sufficient information regarding the prospective juror’s state of mind,’. . . [citation],” though the trial court retains “broad discretion over the number and nature of questions about the death penalty.” (*People v. Stitely* (2005) 35 Cal.4th 514, 540; see also *People v. Amezcua and Flores* (2019) 6 Cal.5th 886, 901.) Ultimately, death-qualification voir dire “must not be so abstract that it fails to identify those jurors whose death penalty views would prevent or substantially impair the performance of their duties as jurors in the case being tried” and “it must not be so specific that it requires the prospective jurors to prejudge the penalty issue based on a summary of the mitigating and aggravating evidence likely to be presented.” (*People v. Cash* (2002) 28 Cal.4th 703, 721–722.) In striking this balance, the trial court may not categorically deny the defense an opportunity to inform prospective jurors of case-specific factors that could invariably cause them to vote for death. (*People v. Carasi* (2008) 44 Cal.4th 1263, 1287 (*Carasi*); *Cash*, at p. 721.) Unless voir dire is so inadequate as to render the ensuing trial fundamentally unfair, it is not a basis for reversal. (*People v. Salazar* (2016) 63 Cal.4th 214, 235.)

#### a. Adequacy of the juror questionnaire

Defendant claims the questionnaire should have included specific inquiries about the impact of young victims on prospective jurors’ decisionmaking and more questions about the death penalty in general. She also argues that the questions posed were too confusing to uncover bias.

Preliminarily, the People argue that defense counsel’s willingness to do away with or significantly limit use of a jury questionnaire at trial constitutes invited error. Although defense counsel did agree to dispose of the questionnaire, the trial court rejected this approach and proceeded to create a questionnaire with the input of both parties. The record therefore does not establish that “ ‘defense counsel intentionally caused the trial court to err,’ ” and no invited error appears. (*People v. Coffman and Marlow* (2004) 34 Cal.4th 1, 49.)

 The People also contend that defendant forfeited claimed inadequacies in the jury questionnaire by failing to object to them. Defendant argues that the defense continued objecting to the questionnaire and attempted to question jurors about the effect of young victims on their decisionmaking. In this context, defense counsel’s concession to using the questionnaire after his efforts to limit and amend it failed does not forfeit defendant’s claim that the trial court erred in omitting proposed defense questions. (*People v. Landry* (2016) 2 Cal.5th 52, 83.)

 A trial court’s discretion regarding the scope of voir dire extends to the wording of the questionnaire. (*Leon*, *supra*, 61 Cal.4th at p. 586.) Here, “[w]here the court exercises its discretion to exclude certain questions from the questionnaire, we will affirm unless the voir dire was so inadequate that the resulting trial was fundamentally unfair.” (*Ibid*.) We find no such inadequacy. The final questionnaire conveyed sufficient case-specific information, twice instructing prospective jurors to consider the number and age of the victims when answering death-qualification questions — facts the trial court also highlighted in oral instructions regarding the questionnaire. After receiving these case-specific factors before death qualification, it is “logical to assume” that when prospective jurors are asked whether they would automatically vote for life or death, “they have answered the question with those case-specific factors in mind.” (*Carasi*, *supra*, 44 Cal.4th at p. 1287; see also *Leon*, at p. 587.)

 Defendant argues that the questionnaire did not elicit sufficient information about death qualification, comparing the number and types of questions in her questionnaire to more extensive model questioning endorsed by the Judicial Council after defendant’s trial. In *People v. Covarrubias* (2016) 1 Cal.5th 838, we addressed challenges to excusals for cause based on written questions that were identical to question Nos. 66 through 69 on defendant’s jury questionnaire. (*Id.* at pp. 861–862.) There, we determined that the trial court’s handling of ambiguous responses to the questions was error but recognized that the questions themselves “called for responses that could adequately inform the trial court whether a prospective juror was substantially impaired within the meaning of *Witt*.” (*Id.* at p. 864.) Although subsequent formulations may have expanded upon these questions, we accept, as we did in *Covarrubias*, that they were adequate for assessing prospective jurors’ views about the death penalty.

 Defendant also contends that the death qualification questions were “practically unintelligible,” citing problems such as compound questions, confusing language, and “legalese” above the education level of most prospective jurors. The People are correct that defendant did not object to the wording of questions as compound or confusing, and any claimed inadequacies on that basis have thus been forfeited. Even if preserved, the claim would not establish error.

Defendant cites *United States v. Littlejohn* (D.C. Cir. 2007) 489 F.3d 1335, 1341–1342, and *Cabe v. Superior Court* (1998) 63 Cal.App.4th 732, 742, in support of her argument that the questionnaire was confusing; however, problems with compound questions addressed in those cases were not present in defendant’s questionnaire.

Defendant also points to prospective jurors who left death-qualification questions blank or could not answer questions as an indication that the questionnaire must have caused confusion. The examples defendant cites are unconvincing. Some of the prospective jurors who failed to answer death-penalty questions had trouble throughout the questionnaire, reflecting a broader difficulty not specific to the death-qualification questions. One prospective juror who left some questions blank responded to other, more complex, questions to indicate that she would automatically vote for the death penalty, a position she reiterated in oral voir dire. Another prospective juror did not answer questions “yes” or “no” as prompted but gave narrative responses reflecting her uncertainty. The record thus reflects difficulties that, “ ‘ “[g]iven the juror’s probable unfamiliarity with the complexity of the law, coupled with the stress and anxiety of being a prospective juror in a capital case, . . . should be expected.” ’ ” (*People v. Wilson* (2008) 44 Cal.4th 758, 779.)

 The questionnaire also accounted for the fact that some prospective jurors might find it confusing and instructed them to mark questions they did not understand so that the trial court and counsel could address them in individual voir dire. The record shows that whether marked or not, the trial court individually questioned prospective jurors about missing, incomplete, or equivocal responses, an appropriate approach to an adequate voir dire. (*People v. Robinson* (2005) 37 Cal.4th 592, 618.)

 Defendant also asserts that the wording of question No. 67, which asked whether prospective jurors would “automatically vote for a penalty of death, without considering any of the evidence,” was inadequate to identify unqualified, death-oriented jurors. Defendant argues that the disqualifying condition in question No. 67 — voting without “considering” evidence — was more stringent than the appropriate standard of automatically voting “regardless of” the evidence. This claim of deficiency is not persuasive.

 The standard enunciated in *Witt* recognizes that “[a] juror who will automatically vote for the death penalty in every case will fail in good faith *to consider the evidence* of aggravating and mitigating circumstances as the instructions require him to do.” (*Morgan v. Illinois* (1992) 504 U.S. 719, 729, italics added.) Although the wording used in defendant’s questionnaire is consistent with this standard, and past model juror questionnaires in California have relied on the same phrase (*People v. Stewart*, *supra*, 33 Cal.4th at p. 447, fn. 12), the high court has also explained that “[r]elevant *voir dire* questions addressed to [death qualification] need not be framed exclusively” by reference to “a particular verb” (*Witt*, *supra*, 469 U.S. at pp. 433–434). The trial court’s questionnaire here adequately reflected the proper standard.

#### b. Adequacy of oral voir dire

 Defendant contends that the trial court’s “rushed” voir dire denied the defense an opportunity to learn about prospective jurors’ potential biases, prevented the selection of an impartial jury, and resulted in an inadequate record concerning the ensuing grant or denial of challenges for cause. Defendant also contends the trial court erred by denying defense efforts to ask direct questions about whether prospective jurors’ ability to vote for a life or death sentence would be affected by crimes involving a mother’s murder of her four children. We reject these claims.

 As evidence of a generally “cursory” voir dire, defendant points to the length of death qualification, which took somewhat less than two days. We have determined that death qualification lasting “approximately three hours and 20 minutes” was not “unduly rapid or otherwise improper” where the record showed that the trial court was “merely efficient.” (*People v. Robinson*, *supra*, 37 Cal.4th at p. 618.) Nothing in the length of the death qualification of defendant’s jury, standing alone, points to inadequate voir dire.

 Defendant asserts the trial court’s limitations on defense questioning during voir dire prevented adequate examination of prospective jurors’ views. In one instance defendant cites, the trial court found Prospective Juror No. 7166’s written answers concerning the death penalty questions sufficient for death qualification where he responded unequivocally that he would not automatically vote for life or death, his other answers were not disqualifying, and his only written remark was that the “punishment should fit the crime.” The court denied defense counsel’s request to ask the prospective juror whether the nature of the crimes in defendant’s case would cause him to automatically vote for the death penalty.

 We have observed that “parsimony in death qualification voir dire is not commendable.” (*Leon*, *supra*, 61 Cal.4th at p. 589; see also *People v. Cash*, *supra*, 28 Cal.4th at p. 721.)[[4]](#footnote-5) Recognizing, however, that “the trial court has broad discretion over the number and nature of questions about the death penalty,” we have found no error where courts have relied heavily on general questions tracking death qualification standards and when “the court and/or counsel asked additional questions to clarify ambiguous responses.” (*People v. Stitely*, *supra*, 35 Cal.4th at p. 540.) Here, the prospective juror’s responses to adequate written questions were not ambiguous and the questionnaire twice instructed him to consider the nature of the charged crimes when answering. The trial court did not abuse its discretion by declining to repeat questions in oral voir dire that had already been answered. “Counsel are entitled to ascertain a prospective juror’s true views on the death penalty. Once those views have been made clear, the court is not obliged to question them further.” (*People v. Salazar*, *supra*,63 Cal.4th at p. 236.)

Defendant claims the trial court also prevented adequate voir dire of Prospective Juror Nos. 3801 and 8318, who gave equivocal answers. Defendant relies on *United States v. Gonzalez* (9th Cir. 2000) 214 F.3d 1109, 1114, to support her argument that equivocal answers are not sufficient to dispel potential bias. This federal decision is not binding on us and does not relate to death qualification; it addressed standards for reviewing bias in a non-capital case under circumstances not present here.

A trial court’s ruling on a prospective juror’s death qualification “ ‘may be upheld even in the absence of clear statements from the juror that he or she is impaired because “many veniremen simply cannot be asked enough questions to reach the point where their bias has been made ‘unmistakably clear.’ ” ’ ” (*People v. Wilson*, *supra*, 44 Cal.4th at p. 779.) “ ‘ “ ‘On review, if the juror’s statements are equivocal or conflicting, the trial court’s determination of the juror’s state of mind is binding.’ ” ’ ” (*People v. Winbush* (2017) 2 Cal.5th 402, 429; see *id.* at pp. 427–428.) The trial court did not limit defense questioning of Prospective Juror No. 8318, who indicated that she would have difficulty imposing the death penalty. The trial court also allowed defense questioning of Prospective Juror No. 3801, who was not sure she could consider a life sentence but would “try.” We find the trial court’s voir dire in these instances adequate and defer to its determination of the prospective jurors’ qualifications, as we must.

Finally, defendant argues that voir dire was inadequate because the trial court was unwilling to allow additional oral questioning regarding prospective jurors’ views in light of the number and age of the victims. We reject this claim. The trial court orally advised prospective jurors of the number and age of the victims and the questionnaire itself prominently conveyed that information. Accordingly, the court could properly assume the jurors had those factors in mind when asked, either orally or in writing, whether they would automatically vote for life or death. (*Carasi*, *supra*, 44 Cal.4th at p. 1287.)

The record demonstrates that voir dire in defendant’s case was not so cursory that it constituted an abuse of discretion or deprived her of a fundamentally fair trial. The trial court properly “err[ed] on the side of caution” to question prospective jurors whose responses to the written questionnaire were ambiguous or potentially disqualifying. (*People v. Wilson*, *supra*, 44 Cal.4th at p. 790.)

## Guilt Phase Issues

### Access to impeachment evidence

 Defendant contends the trial court erred by refusing to enforce defense subpoenas for records and witnesses related to her son’s statements and mental health following the fire. She argues the trial court’s errors violated Evidence Code section 912, as well as her Sixth and Fourteenth Amendment rights. We conclude there was no error.

#### a. Background

 Before trial, defendant issued subpoenas for F.D.’s mental health records to a Dr. Jacobs, and to county social workers who interviewed F.D. and his father after the fire.

During a hearing in which he asserted F.D.’s privilege to prevent disclosure of records from Dr. Jacobs, Fernando Nieves testified that he took F.D. and other family members to the doctor for therapy following the deaths of F.D.’s sisters. When defendant petitioned to have F.D. removed from Fernando’s custody, Dr. Jacobs wrote a letter to the dependency court on behalf of Fernando; the letter provided brief observations about F.D.’s adjustment to living with Fernando’s family and noted F.D.’s desire remain with them. By the time of defendant’s trial, Fernando had been named F.D.’s legal guardian.

The trial court rejected defendant’s argument that Fernando waived F.D.’s psychotherapist-patient privilege by having Dr. Jacobs submit a letter to the dependency court and found no defense interests sufficient to override the privilege. F.D. later testified in the prosecution’s case-in-chief and was excused subject to recall.

 When counsel for the social workers appeared to oppose defense counsel’s subpoena for their records, the trial court ruled that section 827 of the Welfare and Institutions Code required defendant to petition the juvenile court for access to the records. The defense filed a petition with the juvenile court a few days later. When the social workers later responded to subpoenas to testify for the defense, they again asserted state confidentiality protections. Defense counsel provided the trial court with a copy of the social workers’ report but declined to elaborate on how their testimony was relevant, and the trial court sustained the claims of confidentiality.

 Later in the trial, defense counsel announced that the juvenile court had granted his petition for access to records from the social workers and Dr. Jacobs. When the defense sought to impeach the rebuttal testimony of Fernando Nieves with statements from the social workers’ report, the trial court sustained the prosecution objection that the witness’ prior statements could not be used because they did not qualify as inconsistent statements.

#### b. Analysis

A patient has a privilege to refuse to disclose, and to prevent another from disclosing, a confidential communication between the patient and his or her psychotherapist. (Evid. Code, §§ 1014, 1012.) Waiver of the privilege occurs when the holder of the privilege has disclosed a significant part of the communication or consented to disclosure. (Evid. Code, § 912, subd. (a).) The “ ‘holder of the privilege’ ” is the patient, or a guardian or conservator of the patient. (Evid. Code, § 1013.) A person invoking the psychotherapist-patient privilege has the initial burden of showing that the privilege is presumptively applicable. The burden then shifts to the party seeking disclosure to establish that the privilege is inapplicable. (*People v. Gonzales* (2013) 56 Cal.4th 353, 372.) The psychotherapist-patient privilege is to be liberally construed in favor of the patient. (*People v. Wharton* (1991) 53 Cal.3d 522, 554.)

Section 827 of the Welfare and Institutions Code contains protections concerning the confidentiality of juvenile records, whether or not they are covered by other state or federal privileges, and vests the juvenile court with exclusive authority to determine the extent to which those records may be released to third parties. (Welf. & Inst. Code, § 827; *T.N.G. v. Superior Court* (1971) 4 Cal.3d 767, 778.)

 When a defendant proposes to impeach a critical prosecution witness with privileged information, the trial court may be called upon to balance the defendant’s rights under the Sixth Amendment to access such material at trial against the state policies supporting the privilege. (*Davis v. Alaska* (1974) 415 U.S. 308, 319; *People v. Hammon* (1997) 15 Cal.4th 1117, 1127 (*Hammon*).) In *Hammon*, we concluded that a Sixth Amendment right to access protected information does not extend to pretrial disclosure, given the possibility that subsequent developments may eliminate the justification for invading a patient’s statutory privilege. (*Ibid*.)

 Defendant concedes that the Sixth Amendment does not confer a right to discover privileged psychiatric records before trial. (*Hammon*, *supra*, 15 Cal.4th at p. 1128.) She argues instead that F.D.’s father waived the privilege for family therapy records when he asked Dr. Jacobs to submit a letter in connection with dependency proceedings. The trial court did not err in sustaining the psychotherapist-patient privilege with regard to these records.

The letter from Dr. Jacobs to the dependency court did not disclose a “significant part” of communications between F.D. and his doctors that would constitute waiver. (Evid. Code, § 912, subd. (a).) But even if there had been a significant disclosure of protected communications, we would not conclude on this record that F.D. or his legal guardian consented to it. When, as here, a guardian ad litem is required for dependency proceedings (*In re Josiah Z.* (2005) 36 Cal.4th 664, 679), we would not assume that Fernando Nieves, or defendant, could legally waive the psychotherapist-patient privilege during their custody dispute (see *In re Cole C.* (2009) 174 Cal.App.4th 900, 911, fn. 3), and disclosure by Dr. Jacobs did not otherwise constitute waiver (*Roberts v. Superior Court* (1973) 9 Cal.3d 330, 341).

 Defendant contends the trial court violated her Sixth Amendment and due process rights by preventing her from impeaching F.D. with records or testimony from the social workers. Defendant failed to preserve these constitutional claims. They also lack merit.

Defendant argues that the trial court should have reviewed the social workers’ records to determine their materiality to the defense, citing *Pennsylvania v. Ritchie* (1987) 480 U.S. 39, 58–60 and *People v. Webb* (1993) 6 Cal. 4th 494, 517. In *Webb*, we recognized that due process requires the government to provide a defendant with material exculpatory evidence in its possession even when it is subject to a state privacy privilege. (*Id.* at p. 518.) Those principles do not apply here, however, where defendant already had the social workers’ report. We discern no error in the trial court’s ruling “when defendant made no offer of proof at trial explaining why the witness[es] should have been permitted to [testify].” (*People v. Lightsey* (2012) 54 Cal.4th 668, 727, fn. omitted; see also Evid. Code, § 354 (a); *People v. Case* (2018) 5 Cal.5th 1, 44–45.)

Defendant argues that the trial court continued to sustain confidentiality protections after the juvenile court granted defendant’s petition for disclosure of the social workers’ report, denying her the opportunity to introduce impeachment evidence. The record does not bear this out. After the juvenile court’s ruling, defendant did not try to use the report to impeach F.D. at all, though he was still subject to recall. (*People v. Johnson* (2018) 6 Cal.5th 541, 583 [inconsistent out-of-court statement admissible when witness is subject to recall].) The defense did attempt to use the report to impeach Fernando Nieves, but rather than resolving that effort based on confidentiality protections, the trial court ruled that the prior statements were not inconsistent.

 We also reject defendant’s claim that the trial court erred by allowing the prosecution to address questions of privilege related to F.D.’s records. We have held that a trial court may entertain argument from the opposing party on third party discovery and that a prosecutor’s submission of argument in such a matter — as occurred in defendant’s trial — is not improper. (*People v. Superior Court* (*Humberto S.*) (2008) 43 Cal.4th 737, 750–754; see also *Facebook, Inc. v. Superior Court* (*Touchstone*) (2020) 10 Cal.5th 329, 358 [reiterating legitimate role of prosecution concerning third party discovery disputes].)

 Defendant argues that, as a witness for the prosecution, Fernando Nieves had a conflict of interest that should have disqualified him from asserting a privilege on behalf of F.D. Defendant did not raise this issue at trial and thus forfeits it on appeal. Defendant also argues that she should have been granted access to F.D.’s records based on her status as his parent. (Fam. Code, § 3025 [non-custodial parents may access minor child’s records].) We have no need to examine this claim when the record shows that defendant either obtained the records she sought or was entitled to access them by order of the juvenile court.

### 2. Compelled psychological testing of defendant

 Defendant contends the trial court erred by requiring her to submit to psychological examination by prosecution experts and rejecting her request to have a defense expert attend that examination. Defendant argues that after she declined to submit to the examination, the trial court further erred by instructing the jury concerning her refusal and by allowing the prosecution to comment on it. We reject each of these claims.

#### a. Background

 Before trial, the defense conducted evaluations of defendant and provided the prosecution with reports from six defense experts. The trial court executed orders pursuant to Evidence Code section 730 authorizing the appointment of four prosecution experts to interview defendant, analyze test results from defense experts, and provide other assistance to the prosecution.

 When the parties addressed defendant’s examination by prosecution experts, defendant agreed to submit to the examinations provided that a defense expert could be present to observe them. The trial court held a hearing to address the implications of having a defense representative present during prosecution interviews and concluded that such presence would be unnecessary, inappropriate, and might invalidate prosecution expert results.

 Defense counsel did not object to the examination by prosecution experts but continued to argue for the presence of a defense expert. The trial court reiterated its order that defendant was required to submit to interviews without defense monitoring at those interviews and ultimately found that the continued defense objections constituted a refusal by defendant to be examined.

 The prosecution later proposed an instruction regarding defendant’s refusal: if jurors found defendant had refused to submit to prosecution examinations, they could consider that as consciousness of any required mental state. The trial court said that if the prosecution wanted such an instruction, the jury would need to hear evidence of refusal, which could be established through testifying witnesses.

Over objections, a prosecution expert testified that he had been told that defendant refused to be evaluated by him. On cross-examination, the defense attempted to ask the expert whether he would have any concerns about the conditions defendant requested for examination by a prosecution expert. The trial court sustained objections to this questioning and admonished the jury: “I am going to tell the jury at this point that the defendant — when the defendant submits their mental state as an issue in the case, the defendant must submit to examination by the prosecution experts without any conditions. That was not forthcoming this this case.” Two more prosecution experts then testified that defendant refused their requests for an examination.

 Ultimately, the trial court rejected instructions submitted by the defense and prosecution seeking to address defendant’s response to examinations by prosecution experts and concluded that the issue was a matter for argument to the jury. During closing argument, the prosecution repeated the court’s comments that defendant was required to submit to examination by prosecution experts and, without objection, argued that her refusal could be viewed as an attempt to suppress or conceal evidence, affect the weight given to defense expert opinions, and undermine the validity of defense claims.

#### b. Analysis

 In *Verdin v. Superior Court* (2008) 43 Cal.4th 1096 (*Verdin*), we held that courts may not compel a defendant’s mental examination by a prosecution expert unless “authorized by some . . . ‘express statutory provision[]’ (§1054, subd. (e).)” (*Id.* at p. 1109.) This ruling applies retroactively to defendant’s trial in 2000. (*People v. Clark* (2011) 52 Cal.4th 856, 939.) “We have made clear that even in cases governed by *Verdin*, trial courts had the power to order defendants to submit to a psychological examination by a court-appointed expert pursuant to Evidence Code section 730.” (*People v. Banks* (2014) 59 Cal.4th 1113, 1193, italics omitted.)

 Defendant claims the trial court did not have authority under Penal Code section 1054 to order her examination by prosecution experts. The record shows, however, that the trial court exercised its authority under Evidence Code section 730, an appropriate basis for compelling her psychological examination. (*People v. Banks*, *supra*, 59 Cal.4th at p. 1193.)

 Defendant insists the trial court also erred by requiring her to submit to an “unconditional” examination, one without a defense representative present. We have recognized that the presence of defense counsel or other third parties during a court-ordered psychological examination may invalidate its results (*In re Spencer* (1965) 63 Cal.2d 400, 411; *Edwards v. Superior Court* (1976) 16 Cal.3d 905, 911) and have concluded that the presence of counsel at such an examination is not constitutionally required (*In re Spencer*, at p. 412; *People v. Ledesma* (2006) 39 Cal.4th 641, 698 (*Ledesma*)). The trial court therefore did not abuse its discretion by rejecting defendant’s request to have a defense expert present.

 We also reject defendant’s argument that the trial court’s admonition and the prosecutors’ arguments violated her constitutional rights and her rights under Evidence Code section 913.[[5]](#footnote-6) Once defendant placed her mental state at issue, she waived her Fifth and Sixth Amendment rights to object to the prosecution examinations. (*People v. Gonzales* (2011) 51 Cal.4th 894, 929.) Subsequent testimony about defendant’s refusal to cooperate did not violate those rights (*People v. McPeters* (1992) 2 Cal.4th 1148, 1190), and the jury could properly consider the refusal (*People v. Carpenter* (1997) 15 Cal.4th 312, 413).

 Defendant argues the trial court erred by failing to instruct the jury that her refusal was insufficient to establish guilt, and that this had the effect of lessening the prosecution’s burden. Defendant forfeited this claim by failing to request a clarifying instruction at trial (*People v. Guerra* (2006) 37 Cal.4th 1067, 1134), but it would nonetheless fail on the merits. The trial court properly instructed the jury concerning the reasonable doubt standard and there is no reasonable likelihood the jury would have interpreted the trial court’s limited comment to indicate that defendant’s refusal to submit to examination was sufficient to prove her guilt. (*Ibid*.)

 Defendant also claims that the trial court erred by allowing the prosecution to reference defendant’s refusal during closing argument. This argument is forfeited by defendant’s failure to object at trial (*People v. Gamache* (2010) 48 Cal.4th 347, 372), and in any event it lacks merit. The prosecutor argued that evidence of defendant’s refusal was relevant to the weight of defense expert testimony, a consideration we have recognized as proper. (*People v. Carpenter*, *supra*, 15 Cal.4th at p. 412.) Defendant cites no authority for her view that she did not personally refuse to be examined, and she offers no reason to dispel the general rule that absent complaint at trial, the acts of her counsel are imputed to her. (*People v. Marsden* (1970) 2 Cal.3d 118, 125.)

### 3. Scope of expert testimony

 Defendant contends the trial court imposed limitations on mental health testimony by defense experts in violation of her federal constitutional rights to a fair trial, to present a defense, and to a reliable penalty determination. Specifically, she claims the court erred by striking testimony by arson expert Del Winter, precluding other experts from relying on hearsay statements about her background, and sustaining objections to testimony about her mental condition at the time of the fire pursuant to Penal Code sections 28 and 29.[[6]](#footnote-7) We assume some error only concerning the court’s mental state rulings but find it harmless.

#### a. Background

The trial court struck a portion of testimony by defense expert Del Winter, a retired fire investigator. Winter testified that the fire at defendant’s house was set in several places and that a very small amount of gasoline was used. He found it odd that the fire was set where it was not likely to cause significant damage and the gas can was put back in its place after use. He concluded that “the fire didn’t make a lot of sense.” Winter could not recall a similar type of fire, stating, “This is pretty unusual.” Addressing scorched items in the oven, Winter testified that “[i]t’s just like the rest of this case. It just doesn’t make any sense as far as logic.”

 At the conclusion of his testimony, Winter identified several classifications of arson, such as insurance fraud and crime cover-up and a category he called “psycho fires,” in which the motive for the fire is obscure. Although Winter was allowed to opine over objection that defendant’s fire fell into the “psycho” category, the next day the trial court revisited the ruling and struck the testimony.

 Addressing defendant’s mental health experts, the trial court ruled that they would not be allowed to recount hearsay statements during their testimony. The experts relied on statements by defendant and her friends and family members for information about her background, including anoxia (lack of oxygen) at birth, epilepsy and hospitalization at an early age, a difficult upbringing, and use of antidepressant and diet medication shortly before the fire. The trial court determined that the underlying statements and predicate facts did not reflect indicia of reliability and would have to be established through live witness testimony.

Following the court’s ruling, defendant testified concerning details leading up to the fire, including her use of diet medication and Zoloft after having an abortion. The defense also recalled defendant’s stepfather Albert Lucia to testify about defendant’s childhood seizures and verbal and physical abuse by her mother.

 Dr. Humphrey then testified regarding defendant’s background and possible traumas to her brain, stating that the sources she considered to reach her opinion included interviews with defendant and letters written by her, interviews with Albert Lucia and defendant’s aunt, consultations with a non-testifying expert (Dr. Kaser-Boyd), defense team members who spoke to other witnesses, and records such as police reports and prior assessments. The trial court sustained an objection to Dr. Humphrey referencing defendant’s anoxia at birth, but Dr. Humphrey went on to testify that defendant experienced other risk factors consistent with brain damage early in life: being hit hard in the head by her mother several times a day; an incident at age 18 months that Dr. Humphrey interpreted as consistent with seizure disorder; and fainting after the seizure incident consistent with brain malfunction.

 Dr. Ney conducted two examinations of defendant. He testified that he relied on the examinations and interviews with defendant, transcripts of witness testimony, reports by Drs. Humphrey and Kaser-Boyd, police reports, statements by defendant and her son to law enforcement, and statements from defendant’s friends. Although the defense argued that Dr. Ney should be allowed to explain defendant’s statements to him, the trial court reiterated its prior ruling that experts would not be allowed to repeat inadmissible hearsay.

 During Dr. Ney’s testimony, the trial court also sustained numerous objections under section 29. Dr. Ney testified that he considered the possibility that defendant was trying to commit suicide on the night of the fire. The trial court sustained section 29 objections to several additional questions on this topic and struck an answer in which Dr. Ney began to testify that he found defendant’s actions consistent with suicide. The court overruled a section 29 objection concerning whether defendant “was in a depressive state” at the time of the fire but sustained section 29 objections to questions about whether she experienced a seizure, serotonin syndrome, or dissociative state at the time of the fireand to questions regarding defendant’s general mental condition at the time of the fire. The court also struck Dr. Ney’s comment that “it’s quite apparent that this was an organically determined dissociative state.”

 Despite these rulings, Dr. Ney testified about factors affecting defendant at the time of the fire and his opinion that they could have induced a seizure and related dissociation that would render a person effectively unconscious. Dr. Ney testified that defendant heard a roaring on the night of the fire, which he interpreted as an epileptic “aura” preceding a seizure.

 On surrebuttal, when Dr. Plotkin testified concerning defendant’s increased risk for experiencing seizures and delirium, the court sustained a section 29 objection to defense counsel’s question that began by asking Dr. Plotkin to assume that someone was in a dissociative state when lighting the fire.

#### b. Analysis

##### i. Arson expert

 Defendant claims that the trial court’s decision to strike Del Winter’s opinion about a “psycho” fire was erroneous under sections 28 and 29, and that it was improper for the court to make the ruling on its own motion. The trial court had broad discretion to determine the relevance of the testimony and assess whether it was unduly misleading under Evidence Code section 352. (*People v. Sanchez* (2019) 7 Cal.5th 14, 54.) The trial court could also properly limit questions and interpose its own objections under Penal Code section 1044, which outlines a judge’s duty to control trial proceedings and limit the introduction of evidence to relevant and material matters. (*People v. Sturm* (2006) 37 Cal.4th 1218, 1241 (*Sturm*).)

 The trial court was well within its discretion to exclude Winter’s opinion as misleading and irrelevant. We found no abuse of discretion when, as here, the trial court excluded as irrelevant mental state testimony offered by a detective “who was not a psychologist or a psychiatrist, was not qualified to render an opinion as to whether defendant suffered from a mental illness at the time [of the crime,]” and was not “qualified to testify generally about the relationship between mental illness and certain types of behavior.” (*People v. Vieira* (2005) 35 Cal.4th 264, 292.) Winter was similarly unqualified to suggest that the person who set the fire in defendant’s home was mentally unwell, or “psycho.”

 Instructing the jury to disregard Winter’s “psycho” label did not undercut the defense claim that the motive behind the fire was mysterious or missing, as defendant contends. Winter testified that the fire in defendant’s case was intentionally but poorly set, unusual, and did not make sense. The trial court’s limited instruction to disregard the reference to a “psycho” fire, which Winter had added to those attributes, was not error.

##### ii. Expert reliance on hearsay statements

 When an expert testifies concerning case-specific out-of-court statements to explain the bases for his or her opinion, those statements must be properly admitted through an applicable hearsay exception or admitted through an appropriate witness and presented to the expert through a properly worded hypothetical question. (*People v. Sanchez* (2016) 63 Cal.4th 665, 684.) In *Sanchez*, we disapproved of the conclusion in prior decisions such as *People v. Gardeley* (1996) 14 Cal.4th 605, 618, that expert testimony about case-specific hearsay is not admitted for its truth and thus not subject to hearsay rules. (*Sanchez*, at p. 686, fn. 13.) *Gardeley* nonetheless correctly reflected the fundamental rule that “any material that forms the basis of an expert’s opinion testimony must be reliable” (*Gardeley*, at p. 618) and recognized that a trial court “ ‘has considerable discretion to control the form in which the expert is questioned to prevent the jury from learning of incompetent hearsay.’ ” (*id*. at p. 619).

 Defendant contends the trial court’s rulings prevented defense experts Drs. Humphrey and Ney from relying on hearsay statements that described defendant’s background — an essential element of her mental state defense. Drs. Humphrey and Ney both testified, however, that they relied on a variety of out-of-court statements in reaching their opinions. Dr. Humphrey testified about specific background and risk factors she identified from those sources and Dr. Ney testified that defendant’s history and symptoms fit the diagnoses underlying the defense.

 What the trial court did limit was testimony regarding specific hearsay it found unreliable, such as defendant’s post-arrest statements about her own background and medication use. This was well within the court’s discretion. (Evid. Code, § 1252; *People v. Jurado* (2006) 38 Cal.4th 72, 129–130.) Defendant also contends the trial court’s rulings prevented Dr. Kaser-Boyd from testifying at all, but the trial court did not rule on the admissibility of her testimony and there is no evidence in the record to indicate why — among many possible reasons — the defense decided not to call her.

##### iii. Mental state testimony

 Penal Code sections 28 and 29 “permit introduction of evidence of mental illness when relevant to whether a defendant actually formed a mental state that is an element of a charged offense, but do not permit an expert to offer an opinion on whether a defendant had the mental capacity to form a specific mental state or whether the defendant actually harbored such a mental state.” (*People v. Coddington* (2000) 23 Cal.4th 529, 582.) Under these sections, an expert may testify to establish “defendant’s mental disorders at the time of the commission of the crimes” and “whether the defendant’s conduct in committing the crimes was consistent with the expert’s diagnosis of the defendant’s mental condition.” (*People v. Samayoa* (1997) 15 Cal.4th 795, 836–837.) Thus, for example, “[a]n expert’s opinion that a form of mental illness can lead to impulsive behavior is relevant to the existence *vel non* of the mental states of premeditation and deliberation.” (*Coddington*, at pp. 582–583.)

 Defendant argues the trial court erred by limiting questioning of Drs. Ney and Plotkin that would have allowed the jury to infer that defendant did not premeditate or deliberate murder. She also asserts the conditions at issue — serotonin syndrome, a dissociative state, and epilepsy — are not mental diseases, defects, or disorders within the scope of section 29 limitations. Defendant did not raise her contention about the scope of section 29 at trial, where she successfully argued that all of her conditions were mental disorders that the jury should consider in determining required mental states. This aspect of defendant’s claim is therefore forfeited.

 We need not decide whether all the trial court’s limitations on defense questioning under section 29 were justified because any error was harmless. Defendant claims the trial court “eviscerated the defense” by preventing Drs. Ney and Plotkin from testifying about the psychological and medical factors affecting her at the time of the crimes, but the record reveals otherwise.

 Although the trial court struck Dr. Ney’s opinion that defendant was suicidal, defense experts were otherwise able to testify concerning the substance of what defendant sought to present. Dr. Ney testified that defendant was likely experiencing a combination of factors — depression, hormonal changes, serotonin syndrome caused by diet and antidepressant drug interactions, and seizure activity — that induced a dissociative state on the night of the fire. Dr. Plotkin testified that these factors would have caused delirium, a condition distinct from dissociation, and provided additional medical evidence of a seizure close to the time of the fire. Both experts testified that such factors could cause a person to be unconscious or semi-conscious while engaged in complex-seeming behavior.

 Dr. Ney’s opinion that defendant was suicidal not only conflicted with evidence defendant presented from several other witnesses that she was not considering suicide, but it also supported the prosecution theory that defendant had a suicidal plan to kill herself and her children to spite her ex-husbands and boyfriend. Precluding defense questioning on this topic, and limiting questioning about defendant’s other conditions, did not prejudice the defense.

### 4. PET scan evidence

 Defendant contends the trial court erred by excluding evidence of her positron emission topography (PET) scan.[[7]](#footnote-8) Although the trial court erred in ruling PET scan evidence inadmissible under the *Kelly* rule,[[8]](#footnote-9) the court also excluded the PET scan evidence as irrelevant and misleading, a conclusion that was not an abuse of discretion.

#### a. Background

Dr. Michael Gold conducted a neurological examination of defendant. He reviewed her PET scan and determined it showed impairment in some regions of her brain. Based on the neuropsychological assessment by Dr. Humphrey, Dr. Gold concluded that the impairments shown on the PET scan predated defendant’s carbon monoxide poisoning and were mostly likely related to a prior head trauma.

 The prosecution orally requested a *Kelly* hearing on the admissibility of PET scan evidence and the trial court granted its request and set the hearing the following week to accommodate a prosecution expert’s schedule. The trial court dismissed defense counsel’s concern about the availability of defense experts and rejected a subsequent defense motion to either reconsider the need for a hearing or to continue the hearing and allow the defense time to prepare for it.

 After receiving a written motion from the prosecution a few minutes before the *Kelly* hearing was to begin, defendant asked the court to strike the last-minute motion or give the defense an opportunity to review the cases it cited. In addition to arguments to exclude the PET scan under *Kelly*, the prosecution motion claimed the PET scan was irrelevant or unduly prejudicial under Evidence Code section 352. The prosecution also stated that several articles filed with the trial court, which discussed hearings in California and other jurisdictions challenging the use of PET scans, supported exclusion of the evidence. The trial court determined that the hearing would begin immediately, would be framed by the prosecution motion, and would settle all issues regarding admissibility of the proposed PET scan evidence.

 The defense presented three experts, Dr. Gold, Dr. Arthur Kowell, and Dr. Mark Mandelkern. They testified that PET scans had been in use since the 1970s and were accepted in the scientific community as a legitimate measure of brain function, particularly for specific conditions such as temporal lobe epilepsy.

Drs. Gold and Mandelkern found abnormalities in defendant’s PET scan that were consistent with temporal lobe epilepsy. The abnormal regions of her brain were responsible for judgment, memory, and verbal functions, they affected the way a person would act and interpret data, and they were consistent with indications of defendant’s impairment shown by neuropsychological testing. Although it was not possible to determine when defendant’s brain was injured, the abnormalities were consistent with defendant’s childhood trauma and were not patterns that would occur from carbon monoxide poisoning. Dr. Mandelkern testified that the PET scan could not explain defendant’s functioning on the night of the crimes or indicate whether she had seizures.

 The prosecution presented testimony from Dr. Helen Mayberg and Dr. Edwin Amos, who confirmed that PET scans were used to identify temporal lobe epilepsy. They did not find defendant’s PET scan consistent with epilepsy, however, and questioned whether it showed any abnormality at all. Both experts testified that defendant’s PET scan was presented in a way that exaggerated abnormalities that might be trivial, thus skewing the results. They explained that any abnormality on a PET scan would not provide information about defendant’s past behavior or events in defendant’s case.

 The trial court concluded that the PET scan did not meet the *Kelly* test, ruling that there was no substantial agreement in the scientific community about its reliability for the uses defendant intended. The trial court also found the evidence had little if any relevance because it was highly speculative — there was dispute whether the PET scan showed abnormality at all, and, moreover, any perceived abnormality could not be linked to any impact on defendant at the time of the crimes. The court ruled that under Evidence Code section 352 any relevance was outweighed by the undue consumption of time, confusion of the issues for the jury, and undue prejudice.

 Defendant moved for reconsideration, arguing that she did not have time to prepare for the *Kelly* hearing nor notice that the prosecution would argue that proper procedures for administering and reading the PET scan were not followed. She also reiterated arguments that the PET scan was admissible in the guilt and penalty phases of her trial. The trial court denied the motion for reconsideration for the guilt phase and deferred a decision on admissibility for the penalty phase.

#### b. Analysis

 Under the *Kelly* rule, “ ‘when faced with a novel method of [scientific] proof, [we] have required a preliminary showing of general acceptance of the new technique in the relevant scientific community’ before the scientific evidence may be admitted at trial.” (*People v. Daveggio and Michaud* (2018) 4 Cal.5th 790, 831, quoting *Kelly*, *supra*, 17 Cal.3d at p. 30.) *Kelly* “renders inadmissible evidence derived from a ‘new scientific technique’ unless the proponent shows that (1) ‘the technique is generally accepted as reliable in the relevant scientific community’; (2) ‘the witness testifying about the technique and its application is a properly qualified expert on the subject’; and (3) ‘the person performing the test in the particular case used correct scientific procedures.’ ” (*People v. Jackson* (2016) 1 Cal.5th 269, 315–316.) The party offering the evidence has the burden of proving its admissibility by a preponderance of the evidence. (*People v. Ashmus* (1991) 54 Cal.3d 932, 970.) We review de novo the trial court’s evaluation regarding whether a new scientific technique is generally accepted as reliable in the relevant scientific community. (*Id*. at 971.)

 Defendant proposed using the PET scan to corroborate defendant’s history of seizure disorder and related cognitive impairment. At the *Kelly* hearing, expert testimony established that PET scans had been used for decades to evaluate brain abnormality, and defense and prosecution experts alike testified that PET scans were widely accepted and reliable for identifying brain abnormalities caused by temporal lobe epilepsy. That the experts disagreed about whether defendant’s PET scan showed such abnormality was a difference of opinion going to the weight of the evidence, not to its admissibility. (*People v. Fierro* (1991) 1 Cal.4th 173, 214; *People v. Jones* (2013) 57 Cal.4th 899, 953.)

 The People argue there was evidence that defense experts did not use correct scientific procedures when manipulating the PET scan images to highlight deficits. Yet prosecution expert Dr. Mayberg testified that the type of manipulation seen in defendant’s PET scan images was something radiologists did “all the time.” The record does not support a finding that correct scientific procedures were lacking.

 Although the trial court erred in its ruling under *Kelly*, the court did not abuse its discretion by excluding the PET scan under Evidence Code section 352. The trial court retains discretion to exclude even relevant evidence when its probative value is substantially outweighed by the probability that its admission will either necessitate undue consumption of time or create substantial danger of undue prejudice, confusing the issues, or misleading the jury. (*People v. Young* (2019) 7 Cal.5th 905, 931.) “We review a trial court’s decision to admit or exclude evidence ‘for abuse of discretion, and [the ruling] will not be disturbed unless there is a showing that the trial court acted in an arbitrary, capricious, or absurd manner resulting in a miscarriage of justice.’ ” (*People v. Powell* (2018) 5 Cal.5th 921, 951.) A trial court does not abuse its discretion by excluding evidence that produces only speculative inferences. (*People v. Cornwell* (2005) 37 Cal.4th 50, 81, disapproved on other grounds in *People v. Doolin* (2009) 45 Cal.4th 390, 421, fn. 22.)

 In excluding evidence of the PET scan, the trial court found it minimally relevant because it was highly speculative. The court cited consensus among the experts that any abnormal feature on the PET scan could not be linked to defendant’s condition or actions at the time of the fire. After three days of testimony from experts who disagreed about what, if anything, defendant’s PET scan showed, it was not an abuse of discretion for the trial court to determine that undue consumption of time and confusion of issues for the jury outweighed what limited relevance the PET scan might have.

 Defendant claims exclusion of PET scan evidence violated her right to present a defense. We have explained, however, that “the ordinary rules of evidence, including the application of Evidence Code section 352, do not infringe on the accused’s due process right to present a defense.” (*People v. Frye* (1998) 18 Cal.4th 894, 948.) “ ‘Although we recognize that a criminal defendant has a constitutional right to present all relevant evidence of *significant* probative value in [her] favor [citations], “. . . the proffered evidence must have more than ‘slight-relevancy’ to the issues presented.” ’ ” (*People v. Homick* (2012) 55 Cal.4th 816, 865.) Here, defense experts agreed the PET scan could not shed light on whether defendant experienced a seizure on the night of the fire. Furthermore, any abnormality affecting defendant’s judgment or impulsivity had no apparent bearing on the guilt-phase defense, which was based on defendant’s allegedly unconscious actions. Under these circumstances, the PET scan had little probative value and its exclusion did not violate defendant’s constitutional rights.

 Defendant contends the trial court abused its discretion by denying her request for a continuance to prepare for the *Kelly* hearing, and that any insufficient showing by the defense was caused by the court forcing counsel to proceed, resulting in a fundamentally unfair hearing. Exclusion of the evidence under section 352, however, was not the result of an inadequate showing by the defense. Defendant’s experts unequivocally endorsed key facts that supported the trial court’s section 352 ruling: the PET scan could not be correlated to particular conditions or behaviors at the time of the fire or used to conclude that defendant had experienced a seizure. There is no evidence on this record to suggest that additional time to prepare would have altered these conclusions.

 Defendant argues that the trial court also abused its discretion and deprived her of due process by allowing the prosecution to challenge the relevance of PET scan evidence and to seek its exclusion pursuant to Evidence Code section 352 without proper notice to the defense. This argument is forfeited by defendant’s failure to raise it in the trial court. (*People v. Riggs* (2008) 44 Cal.4th 248, 304.) It also lacks merit. In her motion to reconsider the PET scan exclusion, defendant acknowledged that she had notice of prosecution challenges to relevance and prejudicial effect. The prosecution motion raised these issues, the trial court expressed its intent to address them, and defendant ultimately presented evidence and argument on them.

 Finally, defendant contends discovery statutes did not authorize prosecution cross-examination of defense experts outside the *Kelly* framework. Evidence Code sections 403 and 402 plainly permit the trial court to preview evidence and hear testimony before ruling on questions of admissibility. Furthermore, “ ‘[i]n determining the admissibility of evidence, the trial court has broad discretion.’ ” (*People v. Jackson*, *supra*, 1 Cal.5th at p. 320.) “ ‘When the relevance of proffered evidence depends upon the existence of a preliminary fact, the trial court must determine whether the evidence is sufficient to permit the jury to find the preliminary fact true by a preponderance of the evidence.’ ” (*Id*. at p. 321.) Discovery of potential testimony, by both parties, was an unavoidable consequence of the court’s proper function. (Cf. *Hawkins v. Superior Court* (1978) 22 Cal.3d 584, 588 [discovery benefit to accused is incidental to preliminary hearing for probable cause determination].)

### 5. Failure to disqualify a prosecution expert

 Defendant contends the trial court erred when it allowed Dr. Alex Caldwell, whose company scored defendant’s psychological testing, to testify on rebuttal for the prosecution. Defendant argues that Dr. Caldwell’s appointment allowed prosecutors access to confidential and privileged information and violated her Fifth, Sixth, Eighth, and Fourteenth Amendment rights. We conclude that no error occurred.

#### a. Background

 Defense psychologist Dr. Kaser-Boyd administered psychological tests to defendant in 1999 that included the Minnesota Multiphasic Personality Inventory-2 (MMPI-2). Dr. Kaser-Boyd sent the MMPI-2 results to Dr. Caldwell’s scoring service and obtained a computer-generated report that scored and interpreted them according to his proprietary algorithm. Dr. Kaser-Boyd’s report analyzed the 1999 testing and the results of another MMPI-2 administered to defendant in 1997 during family court proceedings.

 Defense counsel’s disclosures to the prosecution included Dr. Kaser-Boyd’s report, the MMPI-2 test results, and Dr. Humphrey’s report, which indicated that she reviewed Dr. Kaser-Boyd’s report and the MMPI-2 testing. After defense counsel announced he would call Dr. Humphrey to testify, the prosecutors obtained the appointment of Dr. Caldwell pursuant to Evidence Code section 730 to assist them and prepare to provide rebuttal testimony regarding the MMPI-2. The trial court denied defendant’s motion to vacate Dr. Caldwell’s appointment.

 During cross-examination, Dr. Humphrey confirmed that she reviewed Dr. Caldwell’s report. She acknowledged that his report found a strong possibility that defendant had exaggerated her test responses or falsified them, a detail Dr. Humphrey had not mentioned in her own report or direct testimony. Dr. Humphrey also acknowledged that the 1997 MMPI-2 found defendant trying hard to present herself in a favorable light, likely invalidating the profile. Dr. Caldwell testified on rebuttal that the 1999 and 1997 results were “strikingly opposite” and suggestive of someone consciously distorting the results.

#### b. Analysis

 Defendant claims the trial court erred by refusing to vacate Dr. Caldwell’s appointment, arguing that disqualification was required because he received confidential and privileged information from the defense. Defendant relies primarily on federal civil cases to support her theory that disqualification was required for “a ‘switching sides’ expert — an expert who is initially retained by one party, dismissed, and employed by the opposing party in the same or related litigation.” (*Erickson v. Newmar Corp.* (9th Cir. 1996) 87 F.3d 298, 300.) Defendant has forfeited this argument by failing to present it to the trial court. The civil disqualification concerns are also inapplicable in this setting, in which Dr. Caldwell’s report and the underlying data were plainly confidential and yet were voluntarily disclosed to the prosecution pursuant to criminal discovery obligations.

 We reject defendant’s argument that the trial court violated her right against self-incrimination by allowing the prosecution to retain Dr. Caldwell and use confidential information in his report against her. “By presenting, at trial, a mental-state defense to criminal charges or penalties, a defendant waives his or her Fifth Amendment privilege to the limited extent necessary to allow the prosecution a fair opportunity to rebut the defense evidence. Under such circumstances, the Constitution allows the prosecution to receive unredacted reports of the defendant’s examinations by defense mental experts, including any statements by the defendant to the examiners and any conclusions they have drawn therefrom.” (*Maldonado v. Superior Court* (2012) 53 Cal.4th 1112, 1125.) Once a defendant calls a defense expert to the stand, she waives “any protections that the attorney-client privilege, the attorney work product doctrine, and the privilege against self-incrimination afforded [her] regarding all matters that [her testifying experts] considered or on which they relied.” (*People v. Combs* (2004) 34 Cal.4th 821, 864 (*Combs*); see also *Ledesma*, *supra*, 39 Cal.4th at p. 695.)

 Furthermore, an expert witness may be cross-examined concerning “the matter upon which his or her opinion is based and the reasons for his or her opinion.” (Evid. Code, § 721, subd. (a)(3).) “The scope of cross-examination permitted under section 721 is broad, and includes examination aimed at determining whether the expert sufficiently took into account matters arguably inconsistent with the expert’s conclusion.” (*Ledesma*, *supra*, 39 Cal.4th at p. 695.) The prosecution may not only cross-examine a defense expert about an otherwise privileged report the expert considered, but also may call the non-testifying author of such a report to testify as a rebuttal witness for the prosecution. (*Combs*, *supra*, 34 Cal.4th at p. 864; *People v. Alfaro* (2007) 41 Cal.4th 1277, 1323.)

 Defendant cites *Rodriguez v. Superior Court* (1993) 14 Cal.App.4th 1260, 1270, to support her argument that she did not waive her privilege against self-incrimination when she disclosed Dr. Caldwell’s report. The appellate court in *Rodriguez* did not address Fifth Amendment protections, ruling instead that attorney-client privileges applied to pretrial discovery and that defendant’s statements about the charged offense could properly be redacted from an otherwise discoverable defense expert’s report. (*Ibid*.) Such considerations are not relevant here, where defense counsel voluntarily disclosed all reports related to MMPI-2 testing to the prosecution.

 Defendant also claims that Dr. Humphrey’s testimony did not result in a waiver of privileges because Dr. Humphrey did not base her opinions on Dr. Caldwell’s report and the defense did not “open the door” by asking Dr. Humphrey about the report during direct examination. This argument, which defendant raises for the first time in her reply briefing, is one we have rejected. (*Combs*, *supra*, 34 Cal.4th at p. 864.) When testifying experts have “read and considered” a non-testifying expert’s report, all privileges regarding the report are waived. (*Ibid.*; *Ledesma*, *supra*, 39 Cal.4th at p. 696.)

 Here, the trial court correctly ruled that defendant waived her Fifth Amendment rights and other privileges regarding Dr. Caldwell’s report when she presented the testimony of Dr. Humphrey. Dr. Humphrey testified that she considered defendant’s MMPI-2 reports but she ignored the implications they raised about defendant’s truthfulness. The prosecution was entitled to call Dr. Caldwell as a witness to address “all the circumstances involved in the testing, not merely the truncated version defendant desire[d].” (*People v. Cooper* (1991) 53 Cal.3d 771, 824; see also *People v. Alfaro*, *supra*, 41 Cal.4th at p. 1326.)

Defendant claims Dr. Caldwell’s appointment to assist the prosecution was improper because it preceded Dr. Humphrey’s testimony, but defendant points to no authority to suggest that the prosecution is prohibited from preparing for anticipated rebuttal. On the contrary, such preparation, even before trial, does not violate defendant’s constitutional rights or other privileges. (*People v. Maldonado*, *supra*, 53 Cal.4th at pp. 1132–1133.) Under Evidence Code section 730, the authority under which Dr. Caldwell was appointed, trial courts may appoint experts to assist the prosecution with rebuttal concerning a mental state defense. (*People v. Banks*, *supra*, at p. 1193; *Maldonado*, at p. 1125.)

 Defendant also contends the trial court’s decision to allow Dr. Caldwell to testify against her violated her Sixth and Fourteenth Amendment rights to the assistance of counsel and the ancillary services of mental health experts. “A criminal defendant has the due process right to the assistance of expert witnesses, including the right to consult with a psychiatrist or psychologist, if necessary, to prepare his [or her] defense. (*Ake v. Oklahoma* (1985) 470 U.S. 68, 83.) The Sixth and Fourteenth Amendments to the United States Constitution also guarantee a defendant’s right to present the testimony of these expert witnesses at trial.” (*People v. San Nicolas* (2004) 34 Cal.4th 614, 661–662.)

 These propositions, focusing on a defendant’s access to confidential expert assistance to prepare a defense, are inapposite here, where the record reveals at least eight experts who assisted the defendant with her mental state defense.

### 6. Asserted prosecutorial misconduct

 Defendant contends that the prosecutor committed misconduct by asking Dr. Plotkin to opine about the credibility and veracity of defense witness testimony by Albert Lucia and defendant. Defendant argues that the questioning constituted misconduct under California law and violated her federal constitutional rights to a fair trial. We reject these claims.

#### a. Background

 Albert Lucia, defendant’s stepfather, spoke to her the day before the fire and testified about her state of mind at that time. After the trial court ruled that defense experts would not be allowed to relate Lucia’s description of defendant’s childhood, the defense recalled him to testify concerning defendant’s history of seizures, hospitalization, and loss of consciousness as a child.

Defendant testified regarding events before, during, and after the fire. She testified that she began taking Zoloft after her abortion. She also claimed that she did not recall writing letters just before the fire that various people received from her; she said that obscenities in one letter, which said “fuck you,” were not her “normal way of talking.” During cross-examination, the prosecutor highlighted defense expert notes indicating that defendant did recall writing the letters and in rebuttal presented evidence that a code defendant used to access her pager messages was “fuck you.” The prosecution also questioned defendant’s veracity during its case-in-chief, presenting evidence that when renting her home defendant falsely stated that she was married with three, rather than five, children, and forged her ex-husband’s signature on the rental application.

 Dr. Plotkin testified on surrebuttal that defendant’s childhood health issues, as described by Lucia, were consistent with childhood seizures, which contributed to his opinion that defendant’s actions could have been affected by a seizure at the time of the fire. On cross-examination, Dr. Plotkin explained that Lucia’s testimony was compelling because it was unlikely a lay person could give the proper sequence of events to reflect seizure disorder. In response to questions suggesting that Lucia could have been coached before he returned to testify a second time, Dr. Plotkin agreed that without more information it was as likely as not that he was coached.

 Dr. Plotkin also described the potential effects of defendant’s medication interactions, basing his conclusions on defendant’s claim that she took Zoloft. The prosecutor asked whether it would affect Dr. Plotkin’s view of defendant’s truthfulness to know that she had a history of malingering on psychological tests, as established by Dr. Caldwell’s analysis of her MMPI-2 test results, and had fabricated a rental agreement and committed fraud on her landlord. Apparently referencing the testimony regarding defendant’s use of obscenities and her pager code, the prosecutor asserted that defendant lied and committed perjury on the witness stand and that physical evidence proved her to be a liar. Dr. Plotkin conceded that if defendant had lied in the past she might lie again.

#### b. Analysis

 “A prosecutor who uses deceptive or reprehensible methods to persuade the jury commits misconduct, and such actions require reversal under the federal Constitution when they infect the trial with such ‘ “unfairness as to make the resulting conviction a denial of due process.” ’ [Citations.] Under state law, a prosecutor who uses such methods commits misconduct even when those actions do not result in a fundamentally unfair trial. [Citation.] In order to preserve a claim of misconduct, a defendant must make a timely objection and request an admonition; only if an admonition would not have cured the harm is the claim of misconduct preserved for review.” (*People v. Alfaro*, *supra*, 41 Cal.4th at p. 1328; see also *People v. Chatman* (2006) 38 Cal.4th 344, 380 [objection to misconduct at trial must be timely “and on the same ground” as that raised on appeal].)

 Defendant first argues that the prosecution committed misconduct by eliciting speculative and irrelevant testimony from Dr. Plotkin about Lucia’s veracity. Defendant’s failure to object on this basis at trial forfeits the claim. Defendant argues that she adequately preserved the misconduct claim with objections that the prosecution misstated the evidence, but this unrelated objection did not give the trial court “an opportunity to correct the asserted abuse.” (*People v. Young* (2005) 34 Cal.4th 1149, 1186.) Even were the claim preserved, we would conclude that it lacks merit.

 “ ‘[I]t is well settled that the scope of cross-examination of an expert witness is especially broad.’ ” [Citation.]” (*People v. Peoples* (2016) 62 Cal.4th 718, 746.) It is therefore permissible to “cross-examine an expert witness more extensively and searchingly than a lay witness, and . . . to attempt to discredit the expert’s opinion.” (*People v. Dennis* (1998) 17 Cal.4th 468, 519; accord *People v. Alfaro*, *supra*, 41 Cal.4th at p. 1325.) “ ‘In cross-examining a psychiatric expert witness, the prosecutor’s good faith questions are proper even when they are, of necessity, based on facts not in evidence. [Citation.]’ ” (*People v. Wilson* (2005) 36 Cal.4th 309, 358.)

 Defendant asserts an expert witness may not express an opinion on witness credibility and that questions concerning that topic improperly called for irrelevant testimony. We have recognized, however, that “[t]here is no reason to categorically exclude” such questioning. (*People v. Chatman*, *supra*, 38 Cal.4th at p. 382.) Dr. Plotkin accepted Lucia’s testimony as credible because he doubted Lucia could fabricate a sequence of events indicative of seizure disorder. The prosecutor’s subsequent questioning about whether Lucia could have been coached was a “plausible alternative” to Dr. Plotkin’s interpretation that was relevant and permissible in order to explore those assertions. (*People v. Anderson* (1990) 52 Cal.3d 453, 479; see also *Chatman*, at p. 382.)

 Defendant next contends the prosecution committed misconduct when questioning Dr. Plotkin about defendant’s credibility by stating that she had lied and committed perjury. Defendant argues that by objecting to such questions as misstating or mischaracterizing the evidence, she preserved the claim. Even if that were case, we would conclude that the claim lacks merit.

 “An expert witness may be cross-examined on, among other subjects, the matter upon which his or her opinion is based and the reasons for the opinion, including any statements by the defendant that formed the basis for the expert’s opinion.” (*People v. Coffman and Marlow*, *supra*, 34 Cal.4th at p. 85; Evid. Code, § 721, subd. (a).) Although it is misconduct to misstate evidence during witness questioning (*People v. Hill* (1998) 17 Cal.4th 800, 825), a prosecutor may address the credibility of witnesses by reference to facts in the record (*People v. Peoples*, *supra*, 62 Cal.4th at p. 796). “Prosecutors tread on dangerous ground, however, when they resort to epithets to drive home the falsity of defense evidence.” (*People v. Ellis* (1966) 65 Cal.2d 529, 539.)

 Characterizing defendant as a liar and perjurer based on an obscene pager code was questionable; defendant’s testimony on cross-examination, however, raised the possibility that she attempted to falsely deny responsibility for writing a highly inculpatory note to her ex-husband. We conclude that the “single reference” to alleged perjury (*People v. Ellis, supra*, 65 Cal.2d at p. 540) did not rise to the level of “ ‘deceptive or reprehensible methods’ ” that amounted to misconduct (*People v. Friend* (2009) 47 Cal.4th 1, 29), and the prosecutor’s other questions — about defendant’s exaggerated or false MMPI-2 responses and misrepresentation and forgery in her rental application — were proper subjects for cross-examination based on evidence before the jury.

### 7. Instructional error related to discovery violations

 Defendant contends the trial court erred when it instructed the jury that she concealed and failed to timely disclose material related to defense experts and lay witnesses. Although the trial court erred, we conclude the error was harmless.

#### a. Background

 Before trial, the defense disclosed reports from its arson expert and experts addressing defendant’s mental state. The prosecutors moved for additional discovery of interviews and other materials considered by defense experts, with defendant arguing that they were not entitled to pretrial discovery of such information. The trial court’s pretrial discovery order tracked the language of section 1054.3, requiring defendant to disclose, among other things, names, addresses, written statements, and reports of statements by witnesses the defense intended to call and expert reports and the results of any physical or mental examinations the defense intended to offer in evidence at trial.

 As trial approached, the prosecution continued requesting discovery from defense experts, including material they relied upon, notes about their testing and communications with other experts, and the methodology experts used to obtain and analyze test results. The defense disclosed some of its experts’ notes concerning the tests administered to defendant but again argued that other notes and materials were protected until the experts testified. The trial court ruled that defendant was entitled to withhold additional privileged information at least until the prosecution rested.

 At the close of the prosecution’s case-in-chief, defense counsel provided what he claimed was all remaining discovery from the defense experts, including notes, interviews, testing, and communications with defendant. The prosecution asked for a month-long continuance to review the new material and prepare to cross-examine defense experts. The prosecution also complained that some of the experts’ handwritten notes were illegible and the prosecutors would need time to review them with its experts.

At the same time, it came to light that defense counsel had not disclosed statements by the first lay witnesses he intended to call, Debbie Wood and Rhonda Hill. Counsel then turned over interview notes for Hill and Wood, and for Albert Lucia and Penny Lucia, claiming he overlooked them because they were in his paralegal’s files. The trial court ruled that those defense witnesses would not be allowed to testify until the court could determine what sanctions to impose for the discovery violations: “It may be that there’s no prejudice to the prosecution, but I am not going to know that until I have a hearing on it.”

The trial court then informed the jury: “Ladies and gentlemen, under the law in California, the laws of discovery require that the prosecution and the defense are required to disclose to each other before trial the evidence each intends to present at trial. The reason for doing that is to promote the ascertainment of truth, save court time, and avoid surprise which may arise during the course of trial. [¶] Disclosures of evidence are required to be made at least 30 days in advance of trial. Any new evidence discovered within 30 days of trial must be disclosed immediately. [¶] This morning, and in one case this afternoon, [defense counsel] provided the prosecution for the first time statements of witnesses that should have been disclosed 30 days before trial. [¶] Because it is late disclosure the court is going to give the People sufficient time to prepare as to one witness, and the court will consider what will happen as the other two or more witnesses. . . . I’ll give you further instructions on this discovery noncompliance later on when the issues are more clarified.”

 The prosecutors’ primary concern regarding the lay statements was whether the defense experts had considered them. After determining that those experts had not considered the Wood and Hill statements, the prosecutors stated that they were prepared to cross-examine them without delay but requested additional time to prepare for the testimony of Albert and Penny Lucia. The trial court decided the testimony would proceed as scheduled, with the prosecution allowed to recall the Lucias to address any issues raised by the new discovery. The untimely statement from Albert Lucia was brief, and addressed an incident involving defendant’s mother. During his testimony, the court sustained objections to the incident as irrelevant.

 Regarding newly disclosed expert materials, the trial court stated that the options were to preclude defense expert testimony entirely or grant a continuance to allow the prosecution time to prepare. The court faulted the defense for the prospect of a two to four week continuance it found “outrageous.” To avoid further delay during which time the prosecution would attempt to decipher experts’ notes, the trial court ordered one of the defense experts to provide the prosecution with a typed transcription of his notes and ordered two others to dictate their notes to court reporters, who would then provide a transcription.

The trial court then informed the jury there would be a two-week recess: “And I wanted to tell you the reason why we’re taking this two-week delay. [¶] The defense has indicated their intention to call psychologists and/or psychiatrists in the defense. The People were provided with the information from their experts — and they need to prepare for this presentation — fairly recently. [¶] And the timing of that disclosure, which is permitted by law; in other words, the defense doesn’t have to provide that information until the witnesses testify. But the delay in the disclosure has necessitated a need to continue this case so that the People can prepare to examine the witnesses. [¶] Also the time is needed because the notes of some of their experts are indecipherable to a great degree, and there’s going to be a need for time to get those notes put into some kind of a form where they can be read and interpreted by the People’s experts.”

The trial court then immediately proceeded to address the discovery violation regarding the lay witnesses, advising the jury with CALJIC former No. 2.28 that “defendant has concealed and failed to timely disclose evidence regarding witness statements — witness statements of Debbie Woods, Rhonda Hill, Al Lucia, Penny Lucia, Delores Morris, and Aunt Lenore.”[[9]](#footnote-10) The court also imposed a $500 monetary sanction on defense counsel under Code of Civil Procedure section 177.5.

 Defense counsel objected to the court referencing the statements of Morris and Lenore Frey — their statements came from defense expert files but they were not defense witnesses. Defense counsel later raised additional objections to the discovery sanction, to the court’s remarks to the jury about the two-week delay, and to the trial court “lump[ing] everything together” when it addressed the continuance and discovery violations at the same time.

 During Dr. Humphrey’s cross-examination, she revealed that she did not use standard normative data to score one of the tests she administered to defendant. She acknowledged that she had been told to provide prosecutors with everything she consulted, but she had not given them information about the new data.

 Just before Dr. Ney testified, the defense turned over the doctor’s recent interview with Albert Lucia, several pages of research articles he considered, and a package of material he planned to reference that included his opinions about a number of conditions and differential diagnoses. Dr. Ney also acknowledged that he interviewed defendant the night before testifying, and, at defense counsel’s suggestion, did not take notes. The prosecution informed the court that there was a “huge amount” of new information in the recently disclosed material.

The trial court concluded that the recent disclosures appeared to violate the court’s ruling made a week prior, requiring Dr. Ney to produce everything he relied upon in forming his opinion. The court then explained to the jury that, given the new disclosure, “I am going to have to make a decision on whether this is a violation of the discovery rules.”

Upon further examination, it appeared the disclosures included a prior, undisclosed report of Dr. Ney’s conclusions and a “pregnancy loss questionnaire” regarding defendant that he had not turned over to the prosecution. The court ordered the defense to make Dr. Ney’s entire file available to the prosecution for review, which in turn revealed additional reports, notes, and articles not previously disclosed. The prosecutor stated that she was not inclined to ask for more time to review the material because doing so would not be fair to the jury, but she requested monetary sanctions against both Dr. Ney and defense counsel, as well as a jury instruction, which the defense opposed.

The trial court denied the request for sanctions against Dr. Ney but agreed over additional defense objections to instruct the jury with CALJIC No. 2.28. The trial court rejected the prosecution’s argument that the initial mid-trial disclosure of defense expert material, and two-week delay, justified the instruction. The prosecutors also conceded the instruction was not appropriate with regard to Penny Lucia’s statement, which they received before her testimony, or for statements from Morris and Frey, who did not testify. The trial court stated that the wording of violations pertaining to Drs. Ney and Humphrey was meant to be broad enough to address Dr. Ney’s failure to take notes when interviewing defendant.

When giving guilt phase instructions, the trial court read to the jury CALJIC former No. 2.28, describing defendant’s violations as concealing and failing to timely disclose “[w]itness statements of Debbie Wood, Rhonda Hill, and Al Lucia” and to provide “[r]eadable notes and reports and other materials relied upon [by] witnesses Dr. Philip Ney and Dr. Lorie Humphrey.” The prosecution also referenced the instruction in closing argument: “You also received an instruction with respect to discovery violations and the failure to produce evidence 30 days prior to trial. [¶] [The] People, along with the Sheriff’s Department, gave all the evidence to the defense in accordance with the law. We can’t say the same for the defense. [¶] The point of it is you can’t find defendant guilty because they hid stuff. The point is why. Why hide? Why hide your defense? [¶] I[’ll] tell you why. Desperation. The evidence in this case is so overwhelming, so enormous, and so vast, what are you going to do? [¶] It’s in order to prevent the prosecution from being able to prepare; in order to gain a strategic advantage.”

#### b. Analysis

 Defendant claims the trial court erred when it sanctioned her for failing to provide the prosecution with items the criminal discovery statutes did not obligate her to disclose and for discovery violations that did not hinder the prosecution. She also argues that the particular instruction given, CALJIC former No. 2.28, was flawed in several respects.

##### i. Scope of discovery violations

 Defendant argues preliminarily that there was no discovery violation related to the disclosure of statements from witnesses Morris and Frey, “readable” notes from defense experts, and materials relied upon by defense experts. We agree that defendant’s disclosure of these items did not violate the criminal discovery statute or the trial court’s pretrial discovery rulings. Defendant also contends that discovery violations that did occur were limited and of little consequence, a characterization we find incomplete in that it refers only to disclosures regarding lay witness.

First, defendant claims that her disclosure of the Morris and Frey statements did not constitute a discovery violation because she did not intend to call them as witnesses in the guilt phase. The record indicates that the statements were among the disclosed files of a defense expert, but Morris and Frey did not testify during the guilt phase, and the prosecutors later conceded that guilt phase instructions about discovery violations should not reference Morris and Frey.

The People argue that the statements were discoverable because defense experts relied on them. Although the prosecution was entitled to material upon which testifying experts relied (*Ledesma*, *supra*, 39 Cal.4th at p. 695), the trial court ruled that defendant’s disclosure of expert materials shortly before their testimony was lawful. There was no discovery violation because the statements did not pertain to witnesses the defense intended to call (§ 1054.3) and the defense disclosed them as a basis for expert opinion at a time the trial court condoned. The People assert defendant forfeited her argument by disclosing the Morris and Frey statements without objection, but this does not establish forfeiture of the claim that discovery sanctions were unwarranted, an objection defendant raised at trial.

The People also argue that the defense improperly delayed disclosures related to Frey. They assert that because she was later called as a penalty phase witness, her statements should have been disclosed 30 days before the guilt phase. The trial court addressed discovery violations related to Frey’s statements during the penalty phase when they arose but this posed no discovery violation with regard to the guilt phase, as the prosecution ultimately acknowledged.

 Second, defendant claims that because she was not required to disclose notes and other material relied upon by defense experts until they were called to testify, there was no discovery violation that warranted the trial court’s instruction that she concealed and failed to disclose “readable” notes.

The People assert that the criminal discovery statute requires defendants to disclose an expert’s raw written notes, citing *Verdin*, *supra*, 43 Cal.4th 1096, 1103–1104, and *Thompson v. Superior Court* (1997) 53 Cal.App.4th 480, 486. These cases do not support such a broad proposition. In *Verdin* we addressed compelled pretrial examination of a defendant by prosecution experts and merely observed that the defendant in that case did not object to disclosing “written or recorded information” possessed by the defense expert; we also determined that the description of discovery in Penal Code sections 1054.1 and 1054.3 did not exclude other types of materials from the reach of the criminal discovery statutes. (*Verdin*, at pp. 1103–1104.) In *Thompson*, the appellate court determined that raw notes of a witness interview constituted witness statements for purposes of Penal Code sections 1054.1 and 1054.3. (*Thompson*, at p. 485.)

Defense counsel’s pretrial disclosures included expert notes concerning their testing of defendant. The notes at issue regarding the later disclosures included defendant’s statements to experts and consultations among defense experts and other defense team members, information normally protected from disclosure until presentation of the expert’s testimony waives applicable privileges. (*Ledesma*, *supra*, 39 Cal.4th at p. 695; § 1054.6; see also Evid. Code, § 721, subd. (a).)

Although an expert’s handwritten notes may be discoverable pursuant to section 1054.3 under some circumstances (*People v. Hajek and Vo* (2014) 58 Cal.4th 1144, 1233), the trial court here ruled that defense counsel was not required to disclose privileged information and work product before trial and acknowledged that defendant was entitled to delay disclosure of notes and other expert materials until her experts testified. We therefore conclude that regardless of their legibility, defendant was not required to disclose the expert notes before trial. “Rather, because the record does not demonstrate the [defendant] failed to disclose any discoverable material, and the undisclosed . . . information fell outside the scope of the discovery statute, no discovery violation appears.” (*People v. Tillis* (1998) 18 Cal.4th 284, 290–291.)

 The People contend that defendant did not object to her experts creating legible versions of their notes and thus forfeited the claim. This point, which defendant disputes, does not relate to defendant’s claim that disclosure of the notes was not untimely. The claim is not forfeited when, as here, defense counsel consistently argued that he was entitled to withhold experts’ notes until they testified.

Third, defendant contends there was no discovery violation regarding “other materials relied upon” by Drs. Ney and Humphrey. Defendant does not challenge the trial court’s ruling that Dr. Humphrey withheld test data from the prosecution in violation of section 1054.3. We do not identify other discovery violations at issue relating to Dr. Humphrey and the parties do not point to any. Regarding disclosures from Dr. Ney, the People argue that “other materials” refers to his notes on defendant’s mental state — not, as defendant argues, to texts or reference works. Neither party offers a citation to the record on this point.

The trial court stated that disclosures from Dr. Ney violated the court’s order, issued shortly before his testimony, that he produce all material on which he relied. This was consistent with the trial court’s earlier rulings that prosecutors were not entitled to outstanding defense expert materials until they testified and reflected the prosecution’s right to access the information for cross-examination, pursuant to Evidence Code section 721, rather than for pretrial discovery, pursuant to Penal Code section 1054.3. (Cf. *People v. Jones* (2003) 29 Cal.4th 1229, 1264 [trial court may order disclosure of unredacted defendant statements before testimony of an expert the defense “ ‘definitely’ ” will call]; *Ledesma*, *supra*, 39 Cal.4th at p. 695.) The trial court also indicated that the discovery sanction addressed Dr. Ney’s failure to take notes when interviewing defendant just before he testified, a concern similarly outside the scope of the discovery statute. We therefore conclude that defendant did not violate her discovery obligations regarding “materials relied upon” by Dr. Ney.

Finally, defendant claims the trial court’s instructions were unnecessary when the statements that were not timely disclosed were brief, uncomplicated, and in some respects unrelated to the guilt phase. Defendant’s argument focusses on statements from lay witnesses — Woods, Hill, Albert Lucia, and Penny Lucia. After receiving late disclosure of statements from Wood and Hill, the prosecutors determined that they did not need additional time to prepare to cross-examine them. The untimely statement from Albert Lucia addressed an incident the court later ruled was irrelevant. And the prosecutors determined that having received Penny Lucia’s statement before she testified, no further sanction was warranted. Although defendant does not address the impact of withholding Dr. Humphrey’s normative data or Dr. Ney’s reports, it appears the prosecution had little trouble managing the late disclosure of lay statements.

To summarize, the trial court twice instructed the jury concerning discovery violations regarding lay witnesses: the first time naming Woods, Hill, Albert Lucia, Penny Lucia, Morris, and Lenore Frey; and the second time naming just Woods, Hill, and Albert Lucia. We have concluded that there was no discovery violation regarding statements from Morris and Frey and, as we have just observed, the prosecutors at trial appeared unaffected by delayed statements from the remaining four lay witnesses.

Regarding expert witnesses, the trial court instructed the jury that defendant failed to timely disclose “[r]eadable notes and reports and other materials relied upon” by Drs. Ney and Humphrey. We have concluded that the notes at issue here were not discoverable pursuant to section 1054.3, readable or otherwise. We have also determined that there was no discovery violation in defense counsel’s disclosure of “other materials relied upon” by Dr. Ney. In other words, discovery violations regarding defense expert materials were limited to reports by Dr. Ney and test data from Dr. Humphrey.

##### ii. Instruction on specific discovery violations

Defendant contends that by citing alleged defense failures that were not discovery violations and referring to discovery violations that did not hinder the prosecution, the trial court’s instructions to the jury were arbitrary, disproportionate, unwarranted, and deprived her of a fair trial and due process. Defendant further claims that the trial court erred by instructing the jury with CALJIC former No. 2.28.

The trial court commented generally on discovery compliance and delays by the defense and also instructed the jury about specific discovery violations. We address the trial court’s general comments relating to discovery compliance in conjunction with defendant’s claims regarding judicial misconduct, *post*, part II.D. Concerning the specific discovery violations, we conclude that it was error to instruct the jury with CALJIC former No. 2.28, given the deficiencies we have identified in that instruction (*People v. Thomas* (2011) 51 Cal.4th 449, 483 (*Thomas*)) and the scope of discovery violations in defendant’s case.

First, the instruction informed the jury that the “defendant” concealed and failed to timely disclose evidence when there was no indication defendant played any such role. It was therefore “ ‘misleading to suggest that “the defendant” bore any responsibility’ [citation] for [her] attorney’s failure to provide discovery.” (*Thomas, supra,* 51 Cal.4th at p. 483.)

Second, although the instruction indicated that concealment and late disclosure could affect the prosecution, there was no evidence that this “had actually deprived the prosecutor ‘of the chance to subpoena witnesses or marshal evidence in rebuttal.’ ” (*Thomas, supra,* 51 Cal.4th at p. 483.) This was particularly true in defendant’s case, where the trial court instructed jurors to consider late disclosures: for Morris and Frey, although there was no discovery violation related to their statements; for Wood, Hill, and Penny Lucia, although the prosecution claimed it was unaffected by the timing of their disclosures; for Albert Lucia, whose statement the court later found irrelevant; and for a broadly articulated category of “readable notes” and “other material” from Drs. Humphrey and Ney that was, on review, inapplicable.

Finally, the instruction “was deficient in informing the jury that ‘ “[t]he weight and significance of any delayed disclosure are matters for your consideration,” ’ because it offered ‘no guidance on how this failure might legitimately affect their deliberations.’ ” (*Thomas*, *supra*, 51 Cal.4th at p. 483.)

##### iii. Prejudice

Defendant asserts the erroneous discovery instructions constitute structural error. “ ‘[M]ost constitutional errors can be harmless.’ [Citation.] ‘[I]f the defendant had counsel and was tried by an impartial adjudicator, there is a strong presumption that any other [constitutional] errors that may have occurred are subject to harmless-error analysis.’ ” (*Neder v. United States* (1999) 527 U.S. 1, 8.) We have therefore recognized that structural error is limited to circumstances in which the error “necessarily affected the whole framework within which the trial proceeded” or “defies analysis for prejudice.” (*People v. Mendoza* (2016) 62 Cal.4th 856, 901.) Neither of these conditions apply here.

We conclude that it is not reasonably probable that an outcome more favorable to defendant would have resulted absent the error (*People v. Watson* (1956) 46 Cal.2d 818, 836), and any federal constitutional error was harmless beyond a reasonable doubt (*Chapman v. California* (1967) 386 U.S. 18, 24).

Defendant did not dispute starting the fire that killed her children and instead testified that she did not remember starting it or sending letters that appeared to reference her planned murder-suicide. There were significant reasons to doubt her defense of experiencing a dissociative state that rendered her unconscious on the night of the fire. Defense experts gave different explanations for defendant’s condition, at times contradicting each other. There was evidence that defendant wrote letters, drove to the post office, and poured and lit gasoline throughout her house, all while allegedly unconscious. Defendant also displayed a selective memory of the evening, remembering some events but not others. Defendant’s son testified regarding her apparent planning for the crime, describing her insistence that the children sleep together in the kitchen the night she set the fire. The jury took less than a day to reach its verdict.

The prosecution briefly referenced the discovery violations in closing and argued that the defense was trying to obstruct the prosecution’s preparation. We conclude, however, that when, as here, the defense was “highly improbable,” the case was “not close,” and the jury reached its verdict quickly, the erroneous instruction was harmless. (*Thomas*, *supra*, 51 Cal.4th at p. 484.)

### 8. Failure to instruct on lesser included offenses

 Defendant contends the trial court erred by failing to instruct the jury on involuntary manslaughter as a lesser included offense of murder. She claims the jury could have (1) concluded that she was unconscious due to her voluntary intoxication or (2) found her guilty of a misdemeanor for unlawfully causing a fire, and that either of these findings supported the lesser included offense of involuntary manslaughter. We reject these claims.

 Investigators found two beer bottles and two wine cooler bottles in defendant’s trash following the fire. Defendant testified that she did not remember how much she drank and her friend also “had a couple of drinks” while at her house. The trial court found no evidence that defendant was unconscious due to her ingestion of alcohol. Defense counsel initially sought an involuntary manslaughter instruction but later argued the instruction was not warranted because defendant did not anticipate the use of prescription medication would cause delirium or unconsciousness, a result experts explained was quite rare.

The trial court did not give an involuntary manslaughter instruction but instructed the jury to consider defendant’s voluntary intoxication in deciding whether defendant possessed the required specific intent or mental state at the time of the charged crimes and special circumstances. The trial court also instructed the jury that if defendant was not conscious but acting “while asleep or while suffering from a delirium, a fever, or because of an attack of epilepsy, a blow on the head, the involuntary taking of drugs, or the involuntary consumption of intoxicating liquor, or any similar cause” she could not be found guilty.

Defense counsel requested instruction on the lesser included offense of arson, arguing that defendant could be found guilty of negligently spilling gasoline, a misdemeanor. The trial court found no evidence to support a lesser included offense and rejected counsel’s argument as “ridiculous.”

 “A trial court must instruct the jury on a lesser included offense, whether or not the defendant so requests, whenever evidence that the defendant is guilty of only the lesser offense is substantial enough to merit consideration by the jury.” (*People v. Halvorsen* (2007) 42 Cal.4th 379, 414, fn. omitted.) The obligation to give an instruction on lesser included offenses exists even when a defendant expressly objects to it. (*People v. Souza* (2012) 54 Cal.4th 90, 114.) We review de novo the trial court’s determination. (*People v. Cole* (2004) 33 Cal.4th 1158, 1218.)

 Involuntary manslaughter is “the unlawful killing of a human being without malice . . . in the commission of an unlawful act, not amounting to a felony; or in the commission of a lawful act which might produce death, in an unlawful manner, or without due caution and circumspection.” (§ 192, subd. (b).)

“Unconsciousness, if not induced by voluntary intoxication, is a complete defense to a criminal charge.” (*People v. Halvorsen*, *supra*,42 Cal.4th at p. 417; see also Penal Code, § 26.) However, “[w]hen a person renders himself or herself unconscious through voluntary intoxication and kills in that state, the killing is attributed to his or her negligence in self-intoxicating to that point, and is treated as involuntary manslaughter.” (*People v. Ochoa* (1998) 19 Cal.4th 353, 423; *People v. Rangel* (2016) 62 Cal.4th 1192, 1227.) Intoxication may not be voluntary when an individual used prescription medication but “did not know or have reason to anticipate the drug’s intoxicating effects.” (*People v. Mathson* (2012) 210 Cal.App.4th 1297, 1313; see also *People v. Chaffey* (1994) 25 Cal.App.4th 852, 856.)

 A person is guilty of arson when “she willfully and maliciously sets fire to or burns . . . any structure, forest land, or property.” (§ 451.) A person is guilty of “unlawfully causing a fire” when she “recklessly sets fire to or burns or causes to be burned, any structure, forest land or property.” (§ 452.) Under section 452, it is a felony to unlawfully cause a fire that results in great bodily injury (§ 452, subd. (a)), burns an inhabited structure or inhabited property (§ 452, subd. (b)), or sets fire to a structure or forest land (§ 452, subd. (c)), and it is a misdemeanor to cause a fire to property (§ 452, subd. (d)).

We conclude there was insufficient evidence to support an involuntary manslaughter instruction based on voluntary intoxication. There is no substantial evidence of alcohol intoxication; instead, the record reflects that defendant consumed “relatively small amounts of alcohol” (*People v. Flannel* (1979) 25 Cal.3d 668, 685) and no evidence suggested that it affected her consciousness. As defense counsel argued, any intoxication defendant experienced from prescription medications was involuntary as a matter of applicable law if defendant was unaware of a potentially intoxicating and rare drug interaction. (*People v. Chaffey*, *supra*, 25 Cal.App.4th at p. 856.) The trial court properly instructed the jury that involuntary intoxication, if proved, would be a complete defense.

 We also find no evidence to support a misdemeanor for causing the fire. Even if we were to assume that unlawfully setting fire to the house is a lesser included offense of arson (*People v. Cole*, *supra*, 33 Cal.4th at p. 1218) and that defendant’s actions were reckless rather than willful, the evidence established that a fire set to burn an inhabited structure killed four children, thus constituting felonies under section 452. Although we have recognized that “an unintentional homicide committed in the course of a noninherently dangerous felony may properly support a conviction of involuntary manslaughter” (*People v. Burroughs* (1984) 35 Cal.3d 824, 835), setting fire to an inhabited structure “ ‘by its very nature . . . cannot be committed without creating a substantial risk that someone will be killed’ ” (*People v. Howard* (2005) 34 Cal.4th 1129, 1135–1136) — and is hence inherently dangerous (see *Cole*, at p. 1218).

### 9. Lying-in-wait special circumstance

 Defendant initially contends the lying-in-wait special circumstance is unconstitutional because it fails to adequately perform the narrowing function required by the Eighth Amendment. We have repeatedly rejected this claim (*People v. Smith* (2018) 4 Cal.5th 1134, 1178; *People v. Delgado* (2017) 2 Cal.5th 544, 576; *People v. Casares* (2016) 62 Cal.4th 808, 849), and decline to reconsider the issue here. Defendant also argues that the evidence at her trial was insufficient to support the lying-in-wait special circumstances because the jury would have had to speculate about the timing of relevant events to find those allegations true. We reject this argument as well.

 “To determine whether the evidence supports a special circumstance finding, we must review ‘ “the entire record in the light most favorable to the judgment to determine whether it discloses evidence that is reasonable, credible, and of solid value such that a reasonable jury could find” ’ the special circumstance allegation true ‘ “beyond a reasonable doubt.” ’ ” (*People v. Becerrada* (2017) 2 Cal.5th 1009, 1028.)

 At the time of defendant’s crime, “the special circumstance of murder while lying in wait (former § 190.2, subd. (a)(15)) required ‘an intentional murder, committed under circumstances which include (1) a concealment of purpose, (2) a substantial period of watching and waiting for an opportune time to act, and (3) immediately thereafter, a surprise attack on an unsuspecting victim from a position of advantage.’ ” (*People v. Casares*, *supra*,62 Cal.4th at p. 827.) “ ‘ “If there is a clear interruption separating the period of lying in wait from the period during which the killing takes place, so that there is neither an immediate killing nor a continuous flow of the uninterrupted lethal events, the special circumstance is not proved.” ’ ” (*People v. Streeter* (2012) 54 Cal.4th 205, 248.) Evidence is insufficient to support a lying-in-wait special circumstance when the theory of surprise requires a specific sequence of events that “cannot be pinpointed” by the evidence. (*People v. Carter* (2005) 36 Cal.4th 1215, 1262; see also *People v. Becerrada*, *supra*, 2 Cal.5th at p. 1029.)

 Defendant argues that evidence of lying in wait was insufficient because the evidence did not establish when the fire began or what defendant was doing immediately before it started. Given the evidence, however, “the jury could reasonably find no lapse in defendant’s culpable mental state between the homicide and the period of watchful waiting.” (*People v. Streeter*, *supra*, 54 Cal.4th at p. 249.)

 On the night of the fire, defendant announced a “slumber party” in the kitchen, which was unusual. Defendant’s son, F.D., did not want to sleep in the kitchen but she insisted. During the evening, defendant wrote and mailed letters that appeared to reveal a plan to kill herself and her children. F.D. did not think he had been asleep for very long when he and his sisters woke up coughing from the fire and his mother told them to stay where they were. From this evidence the jury could reasonably find a “continuous flow” of lethal events in which defendant concealed her purpose and waited until her children fell asleep so that she could set a fire to kill them and herself. This satisfies the elements of the charged lying-in-wait special circumstances.

### 10. Arson-murder special circumstance

 Defendant contends the evidence was insufficient to support the “independent felonious intent required for the arson-murder special circumstance.” (*People v. Mendoza* (2000) 24 Cal.4th 130, 183 (*Mendoza*).) “The requirement of an independent felonious purpose applies to felony-murder special-circumstance findings under section 190.2, subdivision (a)(17). [Citation.] This subdivision authorizes a special circumstance finding when the murder ‘was committed while the defendant was engaged in . . . the commission of [or] the attempted commission of’ various other specified felonies. (§ 190.2, subd. (a)(17).)” (*People v. Powell*, *supra*, 5 Cal.5th at p. 953.)

 As we explained in *Mendoza*, “[a] felony-murder special circumstance, such as arson murder, may be alleged when the murder occurs during the commission of the felony, not when the felony occurs during the commission of a murder. [Citations.] Thus, to prove a felony-murder special-circumstance allegation, the prosecution must show that the defendant had an independent purpose for the commission of the felony, that is, the commission of the felony was not merely incidental to an intended murder.” (*Mendoza*, *supra*, 24 Cal.4th at p. 182.) “Concurrent intent to kill and to commit an independent felony will support a felony-murder special circumstance.” (*Id*. at p. 183; see also *People v. Raley* (1992) 2 Cal.4th 870, 903.) We must therefore determine whether, viewing the evidence in the light most favorable to the prosecution, “any rational trier of fact could have concluded that defendant had a purpose for the arson apart from the murder.” (*Mendoza*, at p. 183.)

 Defendant argues that the prosecution was required to show that she committed murder “to advance” the independent purpose of committing arson, citing *People v. Green* (1980) 27 Cal.3d 1, 61. In *Green*, we concluded that a murder “to advance an independent felonious purpose” satisfied special circumstance requirements whereas a felony “merely incidental to the murder” did not. (*Ibid*.) We have explained, however, that “[t]here is nothing magical about the phrase ‘to carry out or advance’ the felony.” (*People v. Horning* (2004) 34 Cal.4th 871, 908.) A jury “ ‘ “is not required to assign a hierarchy to the defendant’s motives . . . [and] need only determine whether commission of the underlying felony was or was not merely incidental to the murder.” ’ ” (*People v. Powell*, *supra*, 5 Cal.5th at p. 955.)

 Here, there is substantial evidence from which the jury could have concluded that defendant’s “purpose for the arson apart from the murder” was suicide. (*Mendoza*, *supra*, 24 Cal.4th at p. 183.) In a note to her ex-husband sent just before the fire, defendant wrote, “Now you don’t have to support any of us!” She sent a letter to her ex-boyfriend at the same time, stating, “I can’t live without you in my life.” After lighting gasoline throughout the house, defendant lay down with her children and stayed with them while the fire and smoke overwhelmed them; at one point when he regained consciousness, defendant’s son saw that she was unconscious on the floor with his sisters. In her testimony, defendant acknowledged that she had contemplated suicide most of her life.

 Because killing oneself is a purpose separate from killing one’s victims, we conclude the evidence is sufficient to establish that defendant committed arson with “independent, albeit concurrent, goals” of killing herself and killing her children. (*Mendoza*, *supra*, 24 Cal.4th at p. 183.)

Defendant also argues that the arson-murder special circumstance instructions regarding the “independent felonious purpose” requirement were confusing and misleading and failed to adequately advise the jury of the applicable law. The trial court modified CALJIC No. 8.81.17, adding a sentence to indicate that the arson-murder special circumstance could be established when there was a concurrent intent to kill and to commit arson: “To find that the special circumstance referred to in these instructions as murder in the commission of arson is true, it must be proved: (1) the murder was committed while the defendant was engaged in the commission of arson, and; (2) the murder was committed in order to carry out or advance the commission of the crime of arson, or to facilitate the escape therefrom, or to avoid detection. *Moreover, this special circumstance is still proven if the defendant had the separate specific intent to commit the crime of arson, even if she also had the specific intent to kill*. In other words, the special circumstance referred to in these instructions is not established if the arson was merely incidental to the commission of the murder.”

 Defendant acknowledges that the added, italicized language was a correct statement of the law, but argues that, as a whole, the instruction misled the jury into thinking that a concurrent intent to commit arson and to kill could mean that the arson was not “merely incidental” to the murder. If the jurors reached this conclusion, and they apparently did, it was permissible under the law. “We have repeatedly held . . . that a defendant’s possession of the intent to kill concurrently with the intent necessary to support a predicate felony does not necessarily render commission of the predicate felony incidental to the murder.” (*People v. Powell*, *supra*, 5 Cal.5th at 954.)

 We reject defendant’s claim that the instruction allowed the jury to find the arson-murder special circumstance true without finding a separate and independent purpose for committing arson. “[W]e have never suggested that . . . any precise language was required to explain the concept [of independent felonious purpose] to the jury” (*People v. Horning*, *supra*, 34 Cal.4th at p. 908), and we find that the instruction given here adequately conveyed the applicable law and requirements of the arson-murder special circumstance.

 Defendant argues that the modified instruction given to her jury was deficient for the same reasons we found to be error in *People v. Brents* (2012) 53 Cal.4th 599, 613 (*Brents*). There, the trial court modified the standard instruction, CALJIC No. 8.81.17, so that it referred to two different target offenses, assault by force and kidnapping. In that context, the first and second sentences of the second paragraph did not refer to the same target offense and created confusion about what findings were required. (*Brents*, at p. 613.) There could have been no such confusion here. The instructions focused on the proper predicate felony — arson — and correctly informed the jury that “the special circumstance referred to in these instructions is not established if the arson was merely incidental to the commission of the murder.” The danger in *Brents*, that the jury may have found the special circumstance satisfied without finding true the correct predicate felony, was not present in this trial.

## Penalty Phase Issues

Defendant raises evidentiary challenges to the penalty phase of the trial and contends the death penalty was disproportionate to her individual culpability. Because we ultimately reverse the penalty verdict due to the trial court’s misconduct, we need not address each of these challenges. (*People v. Peterson* (2020) 10 Cal.5th 409, 477.) Instead, we discuss here the errors that shed light on the trial court’s misconduct — improper exclusion of mitigating evidence and erroneous instruction regarding discovery violations — and address their prejudicial impact in our analysis of the judicial misconduct claim.

### 1. Exclusion of mitigation evidence

 Defendant claims the trial court erred when it excluded evidence related to neuropsychological testing and PET scan results, and erred when it sustained objections to lay witness testimony about defendant’s good character. We agree that the trial court’s exclusion of this evidence was error.

 “ ‘The Eighth and Fourteenth Amendments require the jury in a capital case to hear any relevant mitigating evidence that the defendant offers, including “ ‘any aspect of a defendant’s character or record and any of the circumstances of the offense that the defendant proffers as a basis for a sentence less than death.’ ” ’ ” (*People v. Rogers* (2013) 57 Cal.4th 296, 346.) “However, while the range of constitutionally pertinent mitigation is quite broad [citation], it is not unlimited.” (*Carasi*, *supra*, 44 Cal.4th at p. 1313). Trial courts retain the authority to “ ‘apply[] ordinary rules of evidence to determine whether such evidence is admissible’ ” (*People v. McDowell* (2012) 54 Cal.4th 395, 434) and “to exclude, as irrelevant, evidence that has no logical bearing on the defendant’s character, prior record, or the circumstances of the capital offense” (*Carasi*, at p. 1313).

#### a. Neuropsychological testing expert

 Defendant contends the trial court violated her rights under the Eighth and Fourteenth Amendments when it excluded testimony by Dr. Kyle Boone regarding defendant’s neuropsychological test results and cognitive impairment.

##### i. Background

Before the penalty phase began the trial court noted that jurors were “getting a little antsy.” After excusing an alternate juror for preplanned travel, and after hearing of a sitting juror’s personal scheduling problems, the trial court worried about losing jurors and stated its belief that “penalty phase witnesses should not take very long.”

On the first day of defense testimony, counsel informed the court and prosecutors that he would be calling a new neuropsychological expert, Dr. Kyle Boone, that afternoon. Dr. Boone’s report acknowledged that Dr. Humphrey used incorrect normative data but concluded that the testing revealed “consistent evidence” of defendant’s impaired memory, frontal lobe skills, and math ability, but otherwise showed average scores and intelligence. The defense estimated Dr. Boone’s testimony would take about 45 minutes and would rehabilitate Dr. Humphrey’s findings, show the impact of defendant’s impairment on her life, evoke sympathy, and explain, if not excuse, the crime.

The prosecutors strenuously objected to Dr. Boone’s testimony. They argued that Dr. Humphrey’s testimony had already addressed section 190.3, factor (k) evidence and that they would need a lengthy continuance to prepare if Dr. Boone testified.

 The trial court ruled that Dr. Boone’s testimony would be cumulative, “take days,” and involve an undue consumption of time, noting that, at any rate, Dr. Boone would not be allowed to testify about how Dr. Humphrey obtained the wrong normative data because such testimony would be speculative.

##### ii. Analysis

 In excluding Dr. Boone’s testimony, the trial court implicitly engaged in analysis under Evidence Code section 352 and found that concerns regarding delay “substantially outweighed” the probative value of the evidence. (Evid. Code, § 352; *People v. Villatoro* (2012) 54 Cal.4th 1152, 1168.) A trial court may exclude from the penalty phase “ ‘ “particular items of evidence” . . . [that are] misleading, cumulative, or unduly inflammatory.’ ” (*People v. Smith* (2005) 35 Cal.4th 334, 357), although evidence “ ‘identical in subject matter to other evidence should not be excluded as “cumulative” when it has greater evidentiary weight or probative value.’ ” (*People v. McKinnon* (2011) 52 Cal.4th 610, 669; see also *Skipper v. South Carolina* (1986) 476 U.S. 1, 8).

 Defendant cites *People v. Lucero* (1988) 44 Cal.3d 1006, in support of her claim that she was entitled to have the jury consider Dr. Boone’s testimony. There, we addressed the exclusion of expert testimony about a defendant’s mental condition in the penalty phase. Although one defense expert was allowed to testify about the condition, we declined to find similar testimony by a second expert cumulative when there was “considerable debate” regarding the methods by which the first examiner reached his conclusions. (*Id*. at pp. 1031–1032.) We also observed that when the prosecution seeks to impeach the testimony of the first defense expert, it might be “very important for defendant to be able to show that not only one, but *two* mental health experts” had reached the same conclusion. (*Id*. at p. 1031.)

Dr. Humphrey was the only expert to testify about cognitive impairment that may have been related to defendant’s childhood abuse and seizures. The People argue that Dr. Boone’s testimony was properly excluded because it would have merely repeated Dr. Humphrey’s conclusions. As defendant argued, however, Dr. Boone’s testimony would have addressed defendant’s mental condition as a mitigating factor and was therefore distinct from evidence presented in the guilt phase. Furthermore, impeachment and rebuttal of Dr. Humphrey’s testimony raised significant questions about her credibility. (Cf. *People v. Kennedy* (2005) 36 Cal.4th 595, 632.) Testimony from Dr. Boone had the potential to carry greater evidentiary weight and was not merely cumulative. (*People v. McKinnon*, *supra*,52 Cal.4th at p. 669; *People v. Lucero*, *supra*, 44 Cal.3d at p. 1031.)

 The probative value of Dr. Boone’s testimony was also relatively substantial, given that expert assessment of neuropsychological test data was both necessary and relevant to establishing mitigating factors related to defendant’s mental functioning. (*People v. Steele* (2002) 27 Cal.4th 1230, 1282–1283.) The high court has reiterated that “ ‘ “defendants who commit criminal acts that are attributable . . . to emotional and mental problems, may be less culpable than defendants who have no such excuse.” ’ ” (*Abdul-Kabir v. Quarterman* (2007) 550 U.S. 233, 251–252.) This concern is reflected in section 190.3, factor (k), which directs the jury to consider “ ‘any other circumstance which extenuates the gravity of the crime,’ [and] therefore allows consideration of any mental or emotional condition.” (*People v. Cox* (2003) 30 Cal.4th 916, 966.) The testimony was also probative of defendant’s state of mind under section 190.3, factor (a). (*People v. Guerra*, *supra*, 37 Cal.4th at p. 1154.)

 We next consider whether undue consumption of time “substantially outweighed” the probative value of Dr. Boone’s testimony. (Evid. Code, § 352.) In *People v. Fuiava* (2012) 53 Cal.4th 622, we concluded the trial court did not err when it excluded mitigation evidence regarding the settlement of lawsuits that alleged misconduct by sheriff’s deputies and was offered to support defendant’s reasonable fear of them. (*Id*. at p. 723.) The probative value of such evidence depended on establishing the merits of the lawsuits notwithstanding the settlement, and we concluded the trial court acted well within its discretion to prevent “trials within a trial” that would have required an undue investment of time and “might have unreasonably distracted the jury.” (*Ibid*.)

No such similar complications accompanied the presentation of Dr. Boone’s testimony, which was directly related to relevant mitigating considerations. The trial court indicated that it would not allow Dr. Boone to address Dr. Humphrey’s reasons for using improper normative data and could have further limited other potentially distracting testimony that focused on Dr. Humphrey’s reputation rather than defendant’s test results and functioning. The defense estimated that direct testimony would take under an hour. The trial court anticipated that the prosecution response and other issues related to the testimony would extend the time needed to a matter of days. The trial court worried about having to excuse jurors, but three alternate jurors were available to “guard against the risk of a mistrial [had] a juror become unable to serve.” (*People v. Cottle* (2006) 39 Cal.4th 246, 258; see also § 1089; *Larios v. Superior Court of Ventura County* (1979) 24 Cal.3d 324, 332 [no legal necessity for mistrial when alternate juror is available].)

 “ ‘A trial court’s exercise of discretion under [Evidence Code] section 352 will be upheld on appeal unless the court abused its discretion, that is, unless it exercised its discretion in an arbitrary, capricious, or patently absurd manner.’ ” (*People v. Johnson* (2019) 8 Cal.5th 475, 521.) When “a specific statute affects the extent and nature of a trial court’s discretion, we examine a trial court’s actions in light of the specific law bearing on that discretion.” (*People v. Rodriguez* (2016) 1 Cal.5th 676, 685.) Section 190.3 expressly authorizes the presentation of “any matter” relevant to mitigation, including “defendant’s character, background, history, mental condition and physical condition” (§ 190.3), and a trial court’s discretion to limit mitigating evidence is informed by this broad charge (see *People v. Spencer* (2018) 5 Cal.5th 642, 680). In this context, we conclude the trial court’s exclusion of relevant, non-cumulative, expert testimony about defendant’s mental condition was an abuse of discretion.

#### b. PET scan results

 Defendant contends the trial court’s ruling excluding PET scan evidence from the penalty phase denied her rights to present a meaningful defense, to offer mitigating evidence, and to a reliable sentence in violation of the Sixth, Eighth, and Fourteenth Amendments.

Defense experts concluded that defendant’s PET scan showed abnormality in regions of her brain that could affect her judgment, memory, and ability to interpret data, among other functions, and that impairment in those areas would be consistent with defendant’s neuropsychological testing. In arguing for the admission of PET scan evidence in the penalty phase, the defense stated that “[w]e are not trying to present a diagnosis of a particular mental illness or disease. [¶]  . . . If they feel sympathy for her because she has a defect or an abnormality in her brain, even though, hypothetically, we could not reliably show a connection with the crime or even her day-to-day behavior, they could still feel sympathy for her.” The prosecution objected to the evidence under *Kelly* and Evidence Code section 352.

 The trial court determined that the PET scan evidence could be used only if scientific consensus recognized a reliable correlation between the scan and a particular condition, and that although mental and emotional conditions were admissible under factor (k), the PET scan did not reliably show any such condition. The trial court ruled that the evidence would also be excluded under Evidence Code section 352 because it had little probative value and would cause undue consumption of time and confusion of issues.

 As we observed when addressing the exclusion of PET scan results from the guilt phase, the evidence established that PET scans had been used for decades to evaluate brain abnormality. The trial court’s reliance on *Kelly* to exclude the evidence from the penalty phase, as in the guilt phase, was therefore error. We concluded the evidence of brain abnormality had little probative value in the guilt phase because it was not possible to associate it with any condition or behavior affecting defendant at the time of the crime. The scope of mitigating evidence admissible in the penalty phase differs, however, and is “quite broad.” (*Carasi*, *supra*, 44 Cal.4th at p. 1313; see § 190.3.)

Thus, whether or not specifically related to her crime, evidence of defendant’s brain damage was relevant in the penalty phase (see *People v. Smith*, *supra*, 35 Cal.4th at p. 359), and it would have contributed to defense efforts to portray defendant as a woman of limited mental resources who broke down in a time of adversity. “Because ‘at the penalty phase the jury decides a question the resolution of which turns . . . on the jury’s moral assessment,’ ‘[i]t is not only appropriate, but necessary, that the jury weigh the sympathetic elements of defendant’s background against those that may offend the conscience.’ ” (*People v. Spencer*, *supra*, 5 Cal.5th at p. 680.) Given “how circumscribed is the court’s discretion to exclude evidence at the penalty phase” (*id.*), we conclude that the trial court erred when it excluded defendant’s PET scan results.

#### c. Character witness testimony

 Defendant contends the trial court erred in sustaining objections to defense questioning of lay witnesses and thus excluded relevant mitigating testimony in violation of her federal constitutional rights.

 Defendant asserts the trial court erred by preventing defense witnesses from telling the jury what they valued about defendant. The trial court sustained relevance objections to questions posed to three of defendant’s friends regarding what they would miss about herand the value she brought to their lives, and to questions for a jail chaplain and Albert Lucia addressing whether defendant could be a help to others. Defense counsel argued that such testimony was relevant under section 190.3, factor (k), and that witnesses should be allowed to express their feelings about defendant “as a friend, as a companion.”

 Evidence that a defendant “ ‘is loved by family members or others, and that these individuals want him or her to live . . . is relevant because it constitutes indirect evidence of the defendant’s character.’ ” (*People v. Rices* (2017) 4 Cal.5th 49, 88.) It was therefore error to exclude as irrelevant testimony that witnesses valued defendant’s friendship and felt she had potential to help others. (*People v. Whitt* (1990) 51 Cal.3d 620, 647 [questions were “not facially irrelevant” when the “range of constitutionally pertinent mitigation is so broad”].)

 The trial court also sustained objections based on relevance when defense counsel tried to elicit testimony from defendant’s friends that she was a nonviolent person and that the crime was out of character for her. As we have noted, however, “ ‘[t]he Eighth and Fourteenth Amendments require the jury in a capital case to hear any relevant mitigating evidence that the defendant offers, including “ ‘any aspect of a defendant’s character . . . that the defendant proffers as a basis for a sentence less than death.’ ” ’ ” (*People v. Rogers*, *supra*, 57 Cal.4th at p. 346.) Character evidence regarding defendant’s nonviolence was relevant in mitigation and it was error to exclude it.

 A chaplain from the jail testified about defendant’s remorse. Defendant contends the trial court improperly sustained relevance objections to questions supporting the chaplain’s credibility — including how infrequently she testified for the thousands of inmates to whom she ministered and whether she believed in the death penalty. We agree. Such questions were relevant and admissible (Evid. Code, §§ 210, 351, 780, subds. (c), (f), (j)) and should have been allowed.

### 2. Instructional error related to discovery violations

 Defendant contends the trial court erred by finding that the defense violated discovery obligations and by instructing the jury to consider those alleged violations, and that these asserted errors violated her statutory and constitutional rights. We conclude that giving the instruction was indeed error.

 Less than a week before the start of the penalty phase, the defense for the first time provided contact information for eight penalty witnesses, along with their corresponding statements and documents, most of which were one to two years old. Counsel explained that when the trial court excluded the PET scan evidence from the penalty phase, the defense decided to call additional witnesses, prompting the new disclosures. The trial court found the explanation implausible and concluded the defense had willfully delayed disclosure. The trial court stated it would initiate contempt proceedings against defense counsel for discovery violations and instruct the jury with CALJIC No. 2.28 regarding the late disclosure.

 When the prosecutors subsequently notified the defense of ten new witnesses, the trial court rejected defense counsel’s request for a continuance to investigate them. Dismissing counsel’s argument that the prosecution should be sanctioned for late discovery, the trial court stated, “[M]aybe they will just call Mr. Folden and Mr. Nieves, and these are people that you’ve known about for two years.” Prosecutors later confirmed their intention to call three of the new witnesses.

 The trial court included CALJIC former No. 2.28 among the penalty phase instructions, informing the jury as follows: “In this case, the defendant failed to timely disclose the following evidence: [¶] 1. The name and address of witnesses Lelia Mrotzek and Lynn Jones. [¶] 2. The name and address and statements of witnesses Shirley Driskell, Cindy Hall, Carl Hall, Shannon North, Tammy Pearce and Tricia Mulder. [¶] . . . . The weight and significance of any delayed disclosure are matters for your consideration. [¶] However, you should consider whether the untimely disclosed evidence pertains to a fact of importance, something trivial, or subject matters already established by other credible evidence.”

 “A trial court’s discovery rulings are reviewed for abuse of discretion. [Citation.] The trial court possesses the discretion to determine what sanction is appropriate to ensure a fair trial.” (*People v. Mora and Rangel* (2018) 5 Cal.5th 442, 466.) We review for substantial evidence the trial court’s decisions regarding compliance with discovery disclosure requirements. (*People v. Riggs*, *supra*, 44 Cal.4th at p. 306.)

Preliminarily, we note that under section 1054.5 court discretion to advise the jury about untimely disclosures is conditional “upon a showing that the moving party complied with the informal discovery procedure.” (§ 1054.5, subd. (b).) Here the record reflects late discovery disclosures by the prosecution, the moving party — yet the record reflects no explanation for that delay. The necessary showing of informal discovery compliance by the moving party is not apparent. Under these circumstances, it appears the trial court exceeded its discretion by advising the jury of late disclosures.

The trial court erred by instructing the jury pursuant to CALJIC former No. 2.28. The deficiencies we identified with the instruction in the guilt phase were also present in the penalty phase: the instruction was misleading by twice informing the jury that “defendant” was at fault for delayed disclosure, suggesting without evidence that the delay affected the prosecution case, and by directing the jurors to consider defendant’s unlawful conduct without guidance concerning how it might legitimately affect their deliberations. (*Thomas*, *supra*, 51 Cal.4th at pp. 483–484.)

Defendant contends that by faulting her for discovery violations during the penalty phase, the instruction also impermissibly set forth a nonstatutory aggravating factor for the jury’s consideration. We agree. “The penalty jury may consider in aggravation only matters coming within one of section 190.3’s factors.” (*People v. Cordova* (2015) 62 Cal.4th 104, 140.) Accordingly, “ ‘[a]ggravating evidence must pertain to the circumstances of the capital offense (§ 190.3, factor (a)), other violent criminal conduct by the defendant (*id*., factor (b)) or prior felony convictions (*id*., factor (c)); only these three factors, and the experiential or moral implications of the defendant’s age (*id*., factor (i)), are properly considered in aggravation of penalty. . . . ’ ” (*People v. Nelson* (2011) 51 Cal.4th 198, 222.) The trial court therefore erred by using an instruction during the penalty phase that put before the jury bad acts attributed to defendant but unrelated to statutorily permissible considerations. (*People v. Carter* (2003) 30 Cal.4th 1166, 1202; *People v. Avena* (1996) 13 Cal.4th 394, 439.)

 Although we have engaged in harmless error analysis concerning similarly erroneous instructions in the guilt phase (*Thomas*, *supra*, 51 Cal.4th at p. 484; *Riggs*, *supra*, 44 Cal.4th at p. 311), we have not addressed such error in the penalty phase of a capital trial (cf. *People v. Peoples*, *supra*, 62 Cal.4th at p. 767). Defendant argues that the instruction in the penalty phase constitutes structural error, citing *Sullivan v. Louisiana* (1993) 508 U.S. 275. In *Sullivan*, the high court ruled that erroneous instruction on the meaning of “reasonable doubt” deprived the defendant of a jury verdict on guilt, a structural defect that “ ‘def[ied] analysis by “harmless-error” standards.’ ” (*Id.* at p. 281.)

Regarding penalty phase errors, the high court has condoned the use of harmless error analysis concerning instructions that directed a jury to consider an invalid aggravating factor (*Clemons v. Mississippi* (1990) 494 U.S. 738, 741; see also *People v. Lewis* (2008) 43 Cal.4th 415, 531), and we have reviewed for harmlessness a trial court’s error in instructing a penalty phase jury on witness credibility (*People v. Mitchell* (2019) 7 Cal.5th 561, 587). The instructional error here is akin to these circumstances and is not a structural error that “rendered the trial ‘fundamentally unfair’ ” or was “ ‘necessarily unquantifiable and indeterminate.’ ” (*People v. Aranda* (2012) 55 Cal.4th 342, 366, italics omitted.)

 We consider the prejudicial effect of this instructional error, and the errors we have identified in the exclusion of mitigating evidence, in the following sections concerning the trial judge’s misconduct.

## Judicial Misconduct

Defendant contends the trial judge was “impatient, undignified, and discourteous” to the defense, engaging in conduct that established bias and misconduct in violation of her state and federal constitutional rights.[[10]](#footnote-11) The People argue that the trial judge’s apparent intemperance must be viewed in light of defense counsel’s “shenanigans,” and indeed, the judge characterized the defense as “one of the most unprofessional performances” he had ever seen. The trial judge’s response to this challenge, however, failed to maintain the high standards of fairness we demand.

We have cautioned that “[t]rial judges ‘should be exceedingly discreet in what they say and do in the presence of a jury’ ” (*Sturm*, *supra*, 37 Cal.4th at p. 1237) and their comments “ ‘must be accurate, temperate, nonargumentative, and scrupulously fair’ ” (*id*. at 1232). “ ‘Although the trial court has both the duty and the discretion to control the conduct of the trial [citation], the court “commits misconduct if it persistently makes discourteous and disparaging remarks to defense counsel so as to discredit the defense or create the impression it is allying itself with the prosecution” [citation]. Nevertheless, “[i]t is well within [a trial court’s] discretion to rebuke an attorney, sometimes harshly, when that attorney asks inappropriate questions, ignores the court’s instructions, or otherwise engages in improper or delaying behavior.” ’ ” (*People v. Woodruff* (2018) 5 Cal.5th 697, 768.)

As the following section details, the trial judge here frequently employed a variety of strategies to properly manage defense counsel’s noncompliance with court procedures. Throughout the trial, however, the trial judge also made inappropriately disparaging and sarcastic remarks to defense counsel, impugning his performance, chastising him for improper behavior, and sanctioning and citing him for contempt in front of the jury.

The trial judge also directed improper comments and questions to witnesses, openly doubting the credibility of one defense expert by asking argumentative and hostile questions and remarking on the possibility that another defense expert “just doesn’t know what he’s talking about.” When confronted with a juror who had been exposed to extrajudicial information that was likely to enhance the credibility of a prosecution expert, the trial court revealed the information to the entire jury. In the penalty phase, the trial judge needlessly reprimanded and belittled a lay witness who testified for the defense.

We conclude that this conduct by the trial judge reflects “a pattern of disparaging defense counsel and defense witnesses in the presence of the jury, and convey[ing] the impression that he favored the prosecution,” and it therefore constitutes misconduct. (*Sturm*, *supra*, 37 Cal.4th at p. 1238.) Although the misconduct did not prejudicially affect the guilt determination, we conclude that it was prejudicial in the penalty phase and requires reversal of the penalty judgment.

### Treatment of defense counsel

Defendant contends the trial judge committed misconduct by expressing “deep hostility” toward defense counsel at the outset of the case and making disparaging comments to him throughout the trial. The record shows that the trial judge spent considerable effort attempting to control counsel’s disregard for evidentiary rules and orders; it also reveals frequent breakdowns in the trial judge’s composure as he faced this challenge.

Although the trial judge’s admonishments to counsel were often measured, he also made comments in front of the jury that portrayed counsel as engaging in deliberately improper tactics, wasting the court’s and jury’s time, purposely misleading the jury, and engaging in unlawful conduct subject to sanctions and contempt. As we have indicated, we must conclude that the trial court’s persistent, discourteous commentary constituted misconduct.

#### Background

At a break in defense counsel’s opening statement outside the presence of the jury, the trial judge warned that much of the statement was argument and the he would begin to sustain objections on that basis if raised. After sustaining the first objections, the judge sent the jury out to warn defense counsel again that his opening statement was “way over the line as far as argument.”

During the remaining two hours of the defense opening statement, the trial judge sustained 15 of 18 objections to improper argument. In the jury’s presence, the judge initially reminded counsel to avoid argument with a brief comment: “let’s confine ourselves to a statement of what you believe the evidence will show, not argument.” When counsel continued to draw objections, the judge became more pointed, exclaiming, “that is pure argument. Stop it.” As the opening statement continued, the judge became sarcastic — after counsel’s reference to evidence showing that defendant had demons to overcome, the judge twice chided counsel by asking, “You’re going to present evidence of a demon?”

Throughout the trial, the trial judge regularly but briefly admonished defense counsel for violating the court’s rule against speaking objections and for making other extraneous or argumentative comments. When defense counsel failed to observe the rules of evidence during his examination of witnesses, the trial judge made periodic comments in front of the jury to highlight proper legal parameters. The judge also curtly admonished defense counsel to “move on” to a different area of questioning on numerous occasions, including when: counsel did not have related exhibits ready; after sustaining objections to counsel’s questions; when evidentiary issues needed to be resolved outside the presence of the jury; and when the judge sought to limit topics he found cumulative or an undue consumption of time.

In addition to regular, brief admonitions and other comments to control defense counsel’s questioning and presentation of evidence, the trial judge periodically expressed general impatience and irritation with counsel’s courtroom behavior with comments such as: “Why don’t you just ask a simple question[?]”; “[D]on’t talk, except to ask a question”; “You don’t listen do you?”; “Stop saying ‘ah’ every time you get an answer”; “Don’t say ‘okay’ anymore”; “Just ask the question in a proper way”; and “What does it take to get the point that you can’t talk at the same time [as the witness?]”

At other times, the trial judge more pointedly portrayed defense counsel as inept or wasting time: remarking, “[y]ou are using valuable court time for something that doesn’t need to be used”; responding to counsel’s question about an exhibit number by stating, “Look at the tag on the front; it might give you a clue”; responding to counsel’s question that began, “I appreciate the fact that . . .” with, “[w]hat your appreciation level is, is not pertinent or helpful”; observing that defense could have done “a little legwork” to develop the evidence “rather than doing some kind of guessing game”; characterizing counsel’s “ridiculous question” as appropriate only for “comic books or the movies”; noting counsel was unprepared to examine witnesses; exclaiming, “Why didn’t you say that when the jury was out?”; referring to counsel’s “tongue wagging” and admonishing him to “get on to something meaningful”; urging counsel, “if you get to some questions that are proper, you might finish sooner rather than later”; noting, “[i]f you thought there was going to be a problem, you should have addressed it when we don’t have to keep the jury waiting”; raising the court’s own objection to counsel’s “nonsensical question”; commenting that the witness cannot answer counsel’s question “unless he’s superman and has x-ray eyes”; and exclaiming, “Can’t you figure that out before we resume?”, among other comments.

The trial judge also reprimanded counsel in front of the jury for offering improper comments and questions, often referencing counsel’s violation of prior rulings: “If you don’t understand my rulings, I’ll stop the examination now”; “I’ve ruled on this in chambers . . . I will not permit you to question him further”; “If I have to tell you one more time about no speaking objections, we’re going to have a problem, you and I”; “That is improper, and you know it”; “You don’t want to [read the entire prior question to the witness], so I will to make sure it’s accurate”; “Well, you’re wrong . . . just ask questions rather than expressing your beliefs”; “[Counsel’s question is] in violation of the court’s order at the 402 hearing”; “I warned you repeatedly that you’re not to make extrinsic comments”; “You’re not to comment on the evidence, and don’t do it again”; You are admonished not to editorialize[] or make gratuitous comments”; “[Counsel’s questioning] contravenes the court’s prior ruling”; “I’ve warned you repeatedly. Don’t editorialize. Don’t make gratuitous comments”; “I have already advised you that you can’t say that, and you’re disobeying a lawful court order”; “[Counsel’s question is] false and misleading”; “[T]his is a violation of the court’s order before the jury came in”; “[D]on’t ask questions that call for irrelevant responses and are improper questions”; “I warned you not to ask any questions that call for hearsay”; and “I’ve warned you, [counsel]. You’re not to make any statements in front of the jury. You’re not to make speaking objections. You’re not to make comments.”

The trial judge made a point of telling jurors when counsel had been reprimanded outside their presence for his conduct in the courtroom — “He’s not supposed to do it[,] I admonished him not to do it again” — and when the judge had concerns about counsel’s discovery compliance. Although the trial judge later decided to formally instruct the jury on discovery violations by the defense, upon learning of late disclosures, he immediately notified the jury of counsel’s potential wrongdoing, noting that he would have to provide “further instructions on this discovery noncompliance later on when the issues are more clarified,” and stating, “I am going to have to make a decision on whether this is a violation of the discovery rules.” After counsel lawfully disclosed expert materials midtrial, the trial judge nonetheless informed the jury that counsel’s “delay in the disclosure” was to blame for a two-week continuance.

Two times during defense counsel’s opening statement for the penalty phase, the trial judge interrupted to reprimand counsel in front of the jury. When defense counsel argued in his penalty phase closing that defendant’s “personal background and the manner and method which she was brought up by her mother . . . is also a factor to consider in mitigation,” the trial court sustained an objection that counsel misstated the law and also remarked that “[t]he statement is a misstatement. The jury will disregard it.” The following morning, concluding that the defense improperly attempted to count each piece of mitigating evidence as a separate statutory factor, the trial court further instructed the jurors, informing them that defense counsel was “wrong” to suggest that there were numerous “factors” involved in factor (k) mitigating evidence.

Outside the jury’s presence, the trial judge took additional measures to control what he viewed as improper behavior, threatening to cut off defense questioning he deemed inappropriate, requiring additional hearings to preview defense evidence and testimony, and imposing sanctions. After repeated warnings, the trial judge imposed a $500 sanction pursuant to Code of Civil Procedure section 177.5 for defense counsel’s speaking objections. The trial judge explained: “I rarely impose sanctions on a lawyer, that is not my rule, generally. [¶] But I have warned you over and over and over again in this trial no speaking objections, and I don’t accept the proposition that you don’t understand it. I do not accept the proposition that you are incapable of complying with it. You’re not an inexperienced attorney, you have trial skills, if you care to use them.”

The trial judge imposed six additional monetary sanctions on defense counsel — one for a discovery violation, three more for speaking objections, and two for commenting on testimony and evidence. After observing that the monetary sanctions had no effect, the trial judge later cited counsel for contempt for additional discovery violations and for commenting on the evidence.[[11]](#footnote-12)

Some of the sanctions were levied in the presence of the jury. In one instance, the trial judge imposed monetary sanctions on counsel for violating a court order. In another, after counsel disagreed with a witness, the trial judge informed counsel, “I’m citing you for misconduct for making that comment, and I’ll cite you later for contempt. . . . I have warned you repeatedly about stating your opinion in front of this jury.”

In eight motions for mistrial and a motion to disqualify the trial judge, the defense asserted judicial bias. Near the end of the prosecution case-in-chief, defense counsel made an oral motion for mistrial, in which he asserted that the trial judge believed he was a liar and was therefore placing unfair limitations on his cross-examination of witnesses. In another motion for mistrial, defense counsel accused the trial judge of having a “personal vendetta” against him and denying defendant a fair trial. In subsequent motions and objections, defense counsel claimed the trial judge: violated defendant’s federal and state constitutional rights by demeaning and showing animosity to the defense, among other misconduct; limited and chastised the defense during examination of witnesses while allowing the prosecution “excessive leeway”; belittled counsel and referred to sanctions in front of the jury; made counsel look bad by reprimanding him in front of the jury; and indicated to the jury that defense counsel’s comment about access to a prosecution expert was “false and misleading.”

The defense also moved to disqualify the trial judge under Code of Civil Procedure section 170.1, citing the requirement of disqualification when “[a] person aware of the facts might reasonably entertain a doubt that the judge would be able to be impartial.” (Code Civ. Proc., § 170.1(a)(6)(A)(iii).) Citing his authority to do so under Code of Civil Procedure section 170.1, subdivision (c), the trial judge ordered the trial to continue notwithstanding the motion.

The trial judge made it clear outside the jury’s presence that he disapproved of defense counsel’s conduct. He believed counsel was dishonest, refused to “play by the rules,” and was trying to inject error into the case. Late in the trial, the judge noted: “[I]f there was ever a case in my experience that stood for a proposition that appellate courts have to give great deference to the trial court’s ruling, this is the case, because if you read the sterile record in this case, you don’t get the flavor of what [counsel] is trying to do.”

#### Analysis

The People acknowledge that “there was indeed an argumentative, contentious atmosphere during the trial between [counsel] and the trial judge” but contend that because the court was responding to defense counsel’s “relentless gamesmanship” and efforts to inject error into the trial, the trial judge cannot be viewed as having committed misconduct.[[12]](#footnote-13) Although the People focus at some length on defense counsel’s conduct, our cases have never suggested that a trial court is relieved of its obligation to remain temperate and impartial when confronted with a lawyer’s provocative or improper behavior.

A trial court’s “frustration and irritation at counsel’s repeated efforts” to violate evidentiary rules can be viewed as “ ‘friction between court and counsel, [that] while not desirable, [is] virtually inevitable in a long trial.’ [Citation.]” (*People v. Blacksher* (2011) 52 Cal.4th 769, 825.) Furthermore, “isolated comments in a lengthy trial in which the court exhibited some impatience with counsel’s argumentative comments and questions do not demonstrate misconduct or bias.” (*People v. Woodruff*, *supra*, 5 Cal.5th at p. 772; see also *People v. Geier* (2007) 41 Cal. 4th 555, 614 [“four fleeting remarks” during lengthy trial did not constitute judicial misconduct]; *People v. Bell* (2007) 40 Cal.4th 582, 605 [“momentary and isolated expression of irritation” did not indicate bias]; *People v. Snow* (2003) 30 Cal.4th 43, 79 [“occasional impatience” with defense questions did not convey bias].)

We do not fault the trial judge here for the brief admonitions he gave to enforce court rules and procedures. And some of the court’s expressions of impatience and frustration with defense counsel might be excused as inevitable given the demands of controlling what the trial judge viewed as an exceptionally unprofessional performance. There are numerous instances, however, in which the trial judge disparaged counsel in a manner we cannot condone.

The trial court directed stern remarks and periodic sarcasm toward defense counsel that impugned counsel’s competence and “inevitably conveyed to the jury the message that the trial court thought that defense counsel was wasting the court’s — and the jury’s — time by asking inappropriate questions.” (*Sturm*, *supra*, 37 Cal.4th at p. 1242.) Indeed, the court commented on counsel wasting “valuable court time,” referred to counsel asking “ridiculous” and “nonsensical” questions, admonished counsel to move onto “meaningful” matters, urged counsel to ask “proper” questions to save time, and commented about counsel inconveniencing the jury.

This was not a case in which the trial court also expressed sarcasm, impatience, and annoyance toward the prosecution, which might have “indicat[ed] its comments were a matter of personal style, not the result of a belief that any of the attorneys was incompetent or that the defense case lacked merit.” (*People v. Abel* (2012) 53 Cal.4th 891, 914; see also *People v. Bell*, *supra*, 40 Cal.4th 582, 605 [court made remarks critical of defense counsel but also expressed annoyance at prosecutor]; *People v. Snow*, *supra*, 30 Cal.4th at p. 79 [noting the trial judge “frequently addressed the prosecutors in an equally brusque manner”].) Instead, the trial court spared the prosecution such treatment while “repeatedly and improperly disparaging defense counsel, which conveyed to the jury the message that the court was allied with the prosecution.” (*Sturm*, *supra*, 37 Cal.4th at p. 1240.)

A trial court may not “impl[y] to the jury that defense counsel was deliberately asking improper questions in order to place inadmissible evidence in front of the jury.” (*Sturm*, *supra*, 37 Cal.4th at p. 1240.) “ ‘It is completely improper for a judge to advise the jury of negative personal views concerning the competence, honesty, or ethics of the attorneys in a trial . . . .’ [Citation.] This principle holds true in instances involving a trial judge’s negative reaction to a particular question asked by defense counsel, regardless of whether the judge’s ruling on the prosecutor’s objection was correct; even if an evidentiary ruling is correct, ‘that would not justify reprimanding defense counsel before the jury.’ ” (*Ibid*.)

Here, the trial judge not only reprimanded counsel for posing improper questions, but, by referencing proceedings outside the jury’s presence in which the court had ruled against the defense, implied that counsel deliberately attempted to skirt the court’s rulings. When the trial judge chastised counsel for speaking objections and other extraneous comments, he highlighted the repeated warnings and admonitions counsel had violated, again conveying to the jury that counsel was flouting court rules to inject impermissible matters into the trial. By voicing concerns about counsel’s discovery compliance and blaming counsel’s lawful disclosures for a delay in the proceedings, the trial judge contributed to the impression that he doubted counsel’s honesty and found his conduct improper.

The trial judge also commented concerning defense counsel misstating the law during his penalty phase closing argument and admonished the jury to disregard counsel’s statement that aspects of defendant’s background could be considered mitigating. Focusing on counsel’s reference to multiple “factors” to consider under section 190.3, factor (k), instead of using the word “circumstances,” the trial court informed the jury that counsel had been “wrong” to suggest that each piece of evidence was a separate factor to consider. Particularly when the jury was instructed with CALJIC No. 8.88, which used “factor” and “circumstance” synonymously in the course of addressing the consideration of aggravating and mitigating evidence, the trial judge’s comments needlessly suggested additional wrongdoing by defense counsel and implied that the defense was trying to improperly inflate the case in mitigation.

On a few occasions, the trial court directly accused counsel of trying to place inaccurate or inadmissible evidence before the jury, telling counsel, “That is improper, and you know it,” referring to another of counsel’s representations as “false and misleading,” and remarking that counsel did not want to provide the jury with an accurate version of evidence. In his remarks in the presence of the jury, the trial judge informed counsel that he would be sanctioned and cited him for misconduct and contempt.

“Jurors rely with great confidence on the fairness of judges, and upon the correctness of their views expressed during trials. For this reason . . . a judge should be careful not to throw the weight of his judicial position into a case, either for or against the defendant.” (*People v. Mahoney* (1927) 201 Cal. 618, 626–627 (*Mahoney*).) With his disparaging commentary regarding counsel’s performance, and “by accusing counsel of unethical and unlawful conduct in front of the jury, the court overstepped the bounds of propriety.” (*People v. Banks*, *supra*, 59 Cal.4th at p. 1203.) These were not “relatively brief and mild” references (*People v. Melton* (1988) 44 Cal.3d 713, 754) or showings of “occasional impatience” (*People v. Snow*, *supra*, 30 Cal.4th at p. 79), but persistent, discourteous, and improper remarks that amounted to misconduct (*Sturm*, *supra*, 37 Cal.4th at p. 1233).

Although we conclude that the trial court engaged in misconduct, we do not agree with all of defendant’s contentions regarding the court’s assertedly improper treatment of defense counsel. As explained below, we reject some of defendant’s claims in this regard.

Defendant contends the trial judge violated her federal constitutional rights by unfairly curtailing defense questioning. Defendant points to no state law error in the examples she cites (*People v. Linton* (2013) 56 Cal.4th 1146, 1202; *People v. Abilez* (2007) 41 Cal.4th 472, 503), and “ ‘ “[a] trial court’s numerous rulings against a party — even when erroneous — do not establish a charge of judicial bias, especially when they are subject to review” ’ ” (*People v. Buenrostro* (2018) 6 Cal.5th 367, 405). Defendant also asserts that the trial judge admonished the defense more frequently than the prosecution to “move on.” than it did to the prosecution. “[A] numerical disparity between sua sponte interventions . . . does not on its own constitute misconduct.” (*Sturm*, *supra*, 37 Cal.4th at pp. 1241–1242.) The remarks, which the trial judge also made to the prosecution, were within the court’s discretion in controlling the conduct of the trial. (*People v. Snow*, *supra*, 30 Cal.4th at p. 79.)

We also reject defendant’s argument that the trial judge showed bias by assertedly treating the defense and prosecution unequally in witness scheduling, discovery compliance, and expert funding. The trial judge played no role in defense expert funding (Pen. Code, § 987.9, subd. (a)), and his other rulings are not sufficient to establish judicial bias, particularly when they are subject to review (*People v. Buenrostro*, *supra*, 6 Cal.5th at p. 405). We have separately addressed defendant’s claims regarding discovery, and defendant does not assert error in the court’s rulings regarding witness scheduling.

 Defendant argues the trial court exhibited bias by having ex parte communications with the prosecution about disclosure obligations regarding impeachment evidence and brief exchanges concerning the order of witnesses, the status of sealed material, and prosecution expert funding. In *People v. Thompson* (2016) 1 Cal.5th 1043, noting that section 1054.7 “contains no express prohibition on ex parte hearings,” we concluded there was no violation of state law when the trial court held an ex parte hearing to address discovery obligations, as the court did here. (*Id*. at p. 1099.) Although defendant contends the trial judge improperly advised the prosecution on discovery obligations, “[t]he judge’s fleeting comment was at most a suggestion, rather than the rendition of advice.” (*Mendoza*, *supra*, 24 Cal.4th at p. 197.) The ex parte discussion of impeachment evidence related to a defense expert who never testified, and other issues briefly addressed were not improper. (*Ibid*.)

### Treatment of witnesses

Defendant contends the trial judge engaged in misconduct and violated her federal constitutional rights when: he assertedly disparaged defense experts Drs. Humphrey, Ney, Plotkin, and Suiter, and lay witness Carl Hall; “glamorized” a prosecution expert; and humiliated defendant when she was on the stand. We agree that some of the trial judge’s remarks and questions were improper — those regarding Drs. Plotkin and Ney, Carl Hall, and the prosecution expert — and reject defendant’s other claims.

#### Background

##### i. Dr. Plotkin

Dr. Plotkin testified for the defense that a diet drug and antidepressant interaction could have provoked a seizure that impaired defendant’s volitional functioning at the time of the fire. On cross-examination, Dr. Plotkin explained that he conducted a search of medical literature, a “PubMed” search, and found a number of articles indicating, contrary to testimony by a prosecution expert, that the diet drug and antidepressant interaction could cause “serotonin syndrome,” which in turn could result in seizures. Echoing the prosecutor, the trial court stated, “[a] lot of these PubMeds deal with rats and monkeys and other animals other than humans, correct?”

When Dr. Plotkin explained that a “volume of literature” documented the drug interaction resulting in serotonin syndrome, the trial court interrupted and the following exchange occurred:

“The court: Wait, Wait. Please. [¶] When you say that you found volumes of articles, do you mean to say that you found volumes of abstracts of articles?

“The witness: That’s correct.

“The court: And you haven’t read any of the articles themselves; is that correct?

“The witness: Right. All from the same search. . . .

“The court: Didn’t you see when you were online on the internet that you can simply log on and order the document by e-mail[?]

“The witness: Well, I did this Saturday.

“The court: Didn’t you see that when you were online that all [sic] do you have do is log on and become a user and you can order the articles online? [¶] Did you see that?

“The witness: I don’t think you can log on on a Saturday to become a user. But it didn’t phase [sic] me to do that. I had enough data, I felt, to make that opinion. . . . The [prosecution] expert testified that he based his opinion on a PubMed search and not reading articles which explained it. . . .

“The court: But he is a board certified toxicologist, correct?

“The witness: This is about serotonin syndrome. . . . He’s not an expert in that.”

In further cross-examination, the prosecutor asked Dr. Plotkin to confirm that it was a “medical certainty” that defendant did not have serotonin syndrome, noting that a Dr. Ordog had examined her at the time of the fire and ruled out the syndrome. Dr. Plotkin observed that the only evidence about Dr. Ordog’s opinion was that two years after the fire a prosecution expert, Dr. Phillips, testified that he spoke to Dr. Ordog, who claimed to have ruled out serotonin syndrome. The trial court then intervened:

“The court: Well, why would you assume that Dr. Ordog is making something up two years later?

“The witness: Your Honor, that’s absolutely not what I said.

“The court: Well, what are you saying?

“The witness: I am saying that in my reading of Dr. Ordog’s notes, at the time it was not considered in the differential. [¶] So how can I say that he ruled it out at the time?

“The court: But how do you know that Dr. Ordog doesn’t have an independent recollection of what happened that may not be reflected in [his] notes?

“The witness: As I said before, I believe that Dr. Phillips in good faith represented his conversation with Dr. Ordog, who said two years later that he ruled it out. . . . But I am saying here that I — that how can you say that a hundred percent, if I am a third party in this?”

The prosecutor later asked Dr. Plotkin a series of questions about his failure to personally interview defendant, despite his ethical obligations to strive to do so. When Dr. Plotkin explained that it would have been best to interview defendant but he did not have enough time, the trial court asked, “Then why did you accept the appointment?” Dr. Plotkin stated that in retrospect he should not have taken the appointment, in part because “the defense experts have been suggested as liars to begin with, and had I known that, I wouldn’t have taken on the personal insults the way I have.”

On redirect, Dr. Plotkin testified that after a seizure a person would experience a state of delirium; he believed the defense expert Dr. Ney misspoke when he referred to the effect of a seizure as “dissociation.” The trial court then interrupted, and the following exchange occurred:

“The court: When you say you believed he misspoke, you never talked to him, did you?

“The witness: No. From reading his testimony.

“The court: For all you know, he said exactly what he meant to say and he just doesn’t know what he’s talking about. [¶] You don’t know that, do you?

“The witness: That’s correct. . . .

“The court: So why don’t you confine your answers to that, and don’t assume what is in Dr. Ney’s mind if you’re [sic] never talked to the man.”

The trial court also reprimanded Dr. Plotkin outside the presence of the jury; after Dr. Plotkin remarked that he had not been allowed to explain his answers, the trial court threatened to have him removed from the county panel of approved experts.

##### ii. Dr. Ney

During cross-examination, the prosecutor attempted to impeach Dr. Ney by referencing his prior testimony that he had not previously qualified as an expert on relevant topics. In response to repeated defense objections to the questioning, the trial court advised the prosecutor to “just ask a direct question, and if it’s inconsistent then you can impeach him with the transcript.” After Dr. Ney gave equivocal answers to questions about his qualifications, the trial court allowed the prosecutor to read the prior testimony in which Dr. Ney acknowledged that he had never qualified to testify as an expert concerning epilepsy, neurology, or carbon monoxide poisoning.

Dr. Ney gave evasive responses to many other prosecution questions and denied or claimed not to remember making statements in his report and prior testimony. Prosecutors accused Dr. Ney of making inappropriate faces and gestures while testifying, and the trial court admonished him to stop mumbling to himself on the stand. Dr. Ney’s testimony about a variety of unusual conditions was disjointed, with many nonresponsive tangents, and appeared to suggest inconsistent theories concerning defendant’s behavior. Some of his claims strained credulity: he testified that some dissociation could go on for months, during which time a person could unknowingly travel or take a job; he also maintained that abortion interfered with a mother’s instinct to protect her offspring and made her more likely to kill her other children.

During a hearing on discovery matters held outside the presence of the jury, the trial court asked Dr. Ney questions regarding his affiliation with “pro-life” organizations and later marked as a People’s exhibit three items from the internet that referenced Dr. Ney’s work, which the court found when researching Dr. Ney’s background. In another hearing outside the jury’s presence, the trial court threatened to have Dr. Ney arrested after learning of suggestions that he might not return to court to testify as ordered.

##### iii. Dr. Humphrey

Dr. Humphrey testified on cross-examination that she used nonstandard normative data for one of the tests she administered; she explained that the unpublished data was new and that she had obtained it from the test authors. During her testimony, the trial judge admonished Dr. Humphrey three times to refrain from interrupting the prosecutor’s questions before he sent the jury out and informed her that he would impose sanctions against her if she did not stop interrupting.

At a hearing regarding her normative data held outside the jury’s presence, Dr. Humphrey acknowledged that the data was not new, as she had testified. She nonetheless defended her reliance on the data, claiming that one of the test authors, Dr. Satz, had recommended it to her. When the prosecutor’s questioning suggested that Dr. Humphrey might be contradicting Dr. Satz’s version of events, the trial court warned, “If you’re not sure, you can say that. But if you specifically deny that and it’s not true, you have a problem.” The trial court ordered Dr. Humphrey to leave the courtroom before a prosecution expert testified that Dr. Satz had denied making any suggestion to Dr. Humphrey regarding the use of unpublished data.

At the conclusion of the hearing, the trial court asserted that Dr. Humphrey was “an out-and-out liar” and stated that he found her explanations “inherently unbelievable.” The court concluded it was “clear” that Dr. Humphrey had committed perjury and if she testified further the prosecution might want to have someone from Attorney General’s office present to avoid a conflict in prosecuting her. The court added that if Dr. Humphrey returned to testify, “[m]aybe someone wants to advise her of her right to have an attorney present. I am not going to do that, because I don’t want to interfere with the defense and dissuade a witness, and that’s one of the reasons I asked her to step outside.”

On rebuttal, the prosecution expert highlighted a number of mistakes in Dr. Humphrey’s report and recounted information from the hearing that had occurred outside the jury’s presence, explaining that the data Dr. Humphrey characterized as new was in fact outdated and that Dr. Satz and another test author had refuted Dr. Humphrey’s claim that they had advised her to use nonstandard normative data. Although the defense had planned to reopen Dr. Humphrey’s testimony, she did not return to testify for any portion of the trial.

At the penalty phase, the defense made an offer of proof regarding testimony by a new neuropsychologist, Dr. Boone, arguing that Dr. Boone was needed to rehabilitate Dr. Humphrey’s psychological testing because the prosecution had so undermined her competence and integrity before the jury. The defense also represented that the circumstances of Dr. Humphrey “being called a liar and a perjurer, and the distress she was in over all of that” prevented the defense from relying on her further as a witness.

##### iv. Defendant’s testimony

On cross-examination, defendant testified that she did not remember seeing her deceased daughters on the kitchen floor and thought they were asleep. She remembered going into the backyard after the fire, which she would have accessed by going through a sliding door near the kitchen. The prosecution attempted to challenge defendant’s testimony by showing her photographs of the victims that reflected how she would have had to step over their bodies to go through the sliding door. Defendant testified that she did not remember stepping over her children. When she would not turn to look at the display of photographs, the trial court ordered, “Put it in front of her then.”

After defense counsel objected to the placement of the photographs, the court responded, “All right. Put it back on the board. [¶] Miss Nieves, you’re ordered to turn around and look at the photographs.” When defendant again refused, stating, “I am not looking at my children if they’re dead,” the court reiterated, “I am ordering you to turn around and look at the photos.” When defendant would not comply, the court sent the jury out and ordered defendant to look at the photographs and be questioned regarding them or be found in contempt of court. The court denied counsel’s request to allow defendant a moment to compose herself before bringing the jury back in.

When cross-examination resumed, defense counsel objected to the form of the prosecutor’s cross-examination and her continued reference to photographs of the victims. The court overruled the objections and denied counsel’s request for a recess due to defendant being distraught. The prosecutor then ended her examination and the jury was excused.

##### v. Dr. Suiter

Dr. Suiter was the court-appointed expert in defendant’s divorce and custody proceedings. During the penalty phase, he testified about evaluating defendant and her family and the bases for his recommendation in 1997, approximately a year before the crime, that she receive custody of her children.

On cross-examination, the prosecution tried to impeach facts that defendant provided to Dr. Suiter during his evaluation, such as her high school grades. The trial court sustained an objection to the relevance of one such question and interposed its own objection to another, stating: “How would he know that? There is no foundation.” After sustaining another objection to similar questioning, the court stated, “He’s here to talk about what happened in 1997,” and to Dr. Suiter added, “[Y]ou don’t have a crystal ball, do you?”

The trial judge then questioned Dr. Suiter himself, reminding Dr. Suiter of defendant’s conviction for killing four of her children and asking: “[Y]ou would probably want to change your opinion made back in 1997, wouldn’t you, if you could do it?” The trial judge appeared surprised when Dr. Suiter said he would not change his opinion, responding, “You wouldn’t?” Dr. Suiter explained that he stood by his recommendation, which was based on the data available to him at the time. The trial judge then instructed the prosecutor to “get on to something else.”

When the prosecutor continued to ask whether defendant’s high school record might cause Dr. Suiter to change his 1997 opinion, the trial court sent the jury out and admonished the prosecutor to stop the line of questioning: “I asked him the most extreme question and it doesn’t change his opinion. So anything subsidiary to that, that’s argument.” The trial court added, “[T]he point is . . . this jury is getting tired of hearing evidence. Let’s just get on with it. A lot of this examination is unnecessary.”

In response to a subsequent prosecution question concerning whether he was afraid of being sued for his custody recommendation, Dr. Suiter responded: “No. . . . I had no crystal ball. . . . I mean, of course anybody in retrospect, I would think, would not have the children present with the mother at all . . . given what happened. [¶] But again, as I stated earlier, given the data that I had at the particular time, I am confident of my recommendation. [¶] There was not even any appreciable complaint about the mother on the part of Mr. Folden.”

The prosecution, which had aggressively sought to prevent the introduction of Folden’s statements about defendant’s parenting, quickly moved to strike Dr. Suiter’s final comment as nonresponsive. The trial court responded to the prosecutor, “Yes it is, [counsel]. It is overruled.” Noting Dr. Suiter’s confusion at the interruption, the court assured him, “You didn’t do anything wrong. [¶] Have you finished your answer?” The court then allowed Dr. Suiter to further explain: “There were no allegations made to me by Mr. Folden that the children were at any risk [from] being with their mother in terms of being physically harmed. Those were not the elements of the evaluation as, quite frankly, is often the case.”

##### vi. Carl Hall

During Hall’s penalty phase testimony about his friendship with defendant, the trial court struck several of his answers as nonresponsive or irrelevant and admonished Hall not to expound on his answers: “I think you’ve answered the question”; “If the answer calls for yes or no, just try to answer it that way, okay?”; and finally, “Look, just answer the question. Don’t add all the other information, okay?” After Hall again began a nonresponsive answer, the trial court sent the jury out and told Hall, “If you answer another question like you just did . . . and try to get before this jury improper evidence that I’ve already ruled upon, I will hold you in contempt of court, put you in jail for five days, fine you up to $1,000 or impose monetary sanctions of up to $1,500. . . . Do you understand that?”

When the jurors returned, the trial court informed them, “The last statement of the witness was stricken, and I have admonished the witness not to get anything else before the jury that is not responsive to the question.” When Hall resumed testifying, he began to answer a question while an objection was pending. Defense counsel advised Hall, “You have to wait,” and the trial court added, “Do you understand when there’s an objection, you’re not supposed to answer the question? [¶] Do you understand that?” When Hall answered, “Okay,” the trial court continued: “Then why did you just make that response when there was an objection raised? [¶] Why did you just make that response when there was objection? [¶] You don’t know do you?” Hall stated that he was very nervous.

During cross-examination, Hall testified that defendant would not have killed her children if she were in her right mind. The prosecutor twice asked who suggested defendant was not in her right mind without receiving a direct answer, after which the trial court interjected, “Why don’t you just answer the question. [¶] Who told you that?” When Hall replied, “Nobody told me,” the trial court remarked, “[T]hen why didn’t you just answer the question that way?”

##### vii. Prosecution expert

John Dehaan testified as a fire reconstruction expert for the prosecution. During that testimony, Juror No. 7 relayed to the bailiff that he recognized Dehaan from a television program, possibly on the Discovery Channel, but that it would not influence how he viewed Dehaan’s testimony. The bailiff wrote a note to the court conveying this information.

At the conclusion of Dehaan’s testimony, in the presence of the jurors, the trial court asked Dehaan whether he had appeared on the Discovery Channel. Dehaan replied affirmatively, adding he had also appeared on the Fox Family Channel. The court then excused all jurors save Juror No. 7 and elicited the juror’s assurances that he would not be influenced by recognizing Dehaan on television. Defense counsel objected to the court questioning Dehaan, argued it suggested a pro-prosecution bias, and moved for a new trial, which the trial court denied without comment.

The prosecution later advised the court that Dehaan was scheduled to appear on the Fox Channel the following day. At the end of the day, the court told jurors, “[T]here’s going to be a program [on television] that involves one of the witnesses who has testified in this case.” The court ordered jurors not to watch the Fox Channel at 9:00 p.m. the next day, or to otherwise “get information from anybody else that may have looked at it. Just avoid it at all costs.”

#### Analysis

We reiterate that judicial questioning and comment during witness testimony should be “temperate rather than argumentative.” (*People v. Cook* (1983) 33 Cal.3d 400, 408.) “A trial court has both the discretion and the duty to ask questions of witnesses, provided this is done in an effort to elicit material facts or to clarify confusing or unclear testimony. [Citations.] The court may not, however, assume the role of either the prosecution or of the defense” and “it must not convey to the jury the court’s opinion of the witness’s credibility.” (*People v. Cook* (2006) 39 Cal.4th 566, 597; see also *Sturm*, *supra*, 37 Cal.4th at p. 1238.)

Defendant asserts the trial court’s questioning undermined Dr. Plotkin’s testimony and improperly assisted the prosecution. The People contend defendant forfeited thisclaim by failing to object at trial. By the time Dr. Plotkin testified, however, the trial court had denied six defense motions for mistrial based on the court’s asserted bias against the defense, and it was proceeding with trial while the defense motion to disqualify the court was pending. In this context, we agree with defendant thatadditional objections likely would have been futile. (*Sturm*, *supra*, 37 Cal.4th at p. 1237.)

The trial court’s initial question to Dr. Plotkin about his PubMed searches underscored the prosecutor’s point that research articles supporting the defense were not based on human studies, a point of clarification within the court’s discretion to elicit. It was strikingly inappropriate, however, for the court to disparage Dr. Plotkin’s review of online literature with repeated, argumentative questions about the ease with which he could have downloaded articles (*Sturm*, *supra*, 37 Cal.4th at pp. 1238–1239), and to do so by making personal observations about access to articles on the PubMed website — facts that had not been presented to the jury (*People v. Abel*, *supra*, 53 Cal.4th at p. 917 [trial court erred by using personal knowledge to comment on testimony]; *People v. Gonzales and Soliz* (2011) 52 Cal.4th 254, 323 [same]). In response to Dr. Plotkin’s observation that the prosecution expert had also relied on abstracts of research, the trial court’s comment, “[b]ut he is a board certified toxicologist,” implied the court’s belief that the prosecution expert had greater expertise than Dr. Plotkin and contributed to the impression that the court discounted Dr. Plotkin’s testimony.

The trial court’s questions posed to Dr. Plotkin about Dr. Ordog, rather than merely clarifying testimony, reprimanded Dr. Plotkin for questioning the prosecution evidence. When Dr. Plotkin cited a lack of contemporaneous documentation for Dr. Ordog’s conclusions, the court’s response — “how do you know that Dr. Ordog doesn’t have an independent recollection of what happened that may not be reflected in [his] notes?” — was accusatory, disparaging, and a pointed defense of the prosecution’s evidence. By contrast, the trial court’s remarks about Dr. Ney — “[f]or all you know, he said exactly what he meant to say and he just doesn’t know what he’s talking about” — were highly improper, both harsh and demeaning to Dr. Plotkin and blatantly contemptuous of Dr. Ney. If there were any question about the tenor of the trial court’s remarks, Dr. Plotkin’s unchallenged comment that defense experts had been made out to be liars provided further indication of their hostile and disparaging impact.

The trial court also improperly chastised and demeaned penalty phase witness Carl Hall. The People claim that Hall was a “recalcitrant witness” whose behavior the trial court properly attempted to control. It is not clear why the court believed Hall attempted to flout a prior ruling limiting his testimony, but it was improper for the court to tell the jury that it had admonished Hall “not to get anything else before the jury that is not responsive to the question.” (See *Sturm*, *supra*, 37 Cal.4th at p. 1239.) It is also not apparent whether Hall understood he should refrain from testifying while an objection was pending, but we see no reason for the trial court to berate him for it in front of the jury. “The court’s questioning must be ‘ “temperate, nonargumentative, and scrupulously fair” ’ [citation], and it must not convey to the jury the court’s opinion of the witness’s credibility.” (*People v. Cook*, *supra*, 39 Cal.4th at p. 597.) The trial court’s failure to maintain such composure when addressing Hall was improper.

Defendant contends the trial court improperly “glamorized” prosecution expert John Dehaan, demonstrating a pro-prosecution bias. The trial court was addressing a circumstance in which a juror had been exposed to extraneous facts about Dehaan’s credentials that may have added to his credibility. (Cf. *In re Richards* (2016) 63 Cal.4th 291, 313.) Our cases establish that a “juror’s ‘receipt of information about a party or the case that was not part of the evidence received at trial,’ ” even if “passive or involuntary,” constitutes juror misconduct. (*People v. Cowan* (2010) 50 Cal.4th 401, 507.) Rather than simply dispel any potential prejudice from the juror’s inadvertent exposure (*People v. Linton*, *supra*, 56 Cal.4th at p. 1213), the trial court elicited and highlighted Dehaan’s television appearances for the entire jury, a matter unnecessary to the clarity or completeness of his testimony. In this context, the trial court’s questioning of Dehaan was improper, “even if no impropriety was intended.” (*People v. Geier*, *supra*, 41 Cal.4th at p. 614.)

Defendant advances additional claims about the trial court’s allegedly improper treatment of defense witnesses. We find no merit in defendant’s remaining contentions.

Defendant argues that the court’s treatment of the defense neuropsychologist, Dr. Humphrey — particularly, the suggestion the court made outside the presence of the jury, that she committed perjury — prevented her from returning to testify and thus violated defendant’s right to present a defense. “The government violates a defendant’s constitutional right to compulsory process when it interferes with the exercise of a defendant’s right to present witnesses on [her] own behalf.” (*People v. Capers* (2019) 7 Cal.5th 989, 1008.) Our cases require a defendant to show that interference was “egregious and improper” (*People v. DePriest* (2007) 42 Cal.4th 1, 55), “was a substantial cause of [the] witness’s refusal to testify,” and “ ‘at least a reasonable possibility that the witness could have given testimony that would have been both material and favorable.’ ” (*Capers*, at p. 1008). Defendant does not meet this burden.

Defense counsel offered two reasons why he did not bring Dr. Humphrey back to testify. First, the prosecution questioning and rebuttal — which showed that she used incorrect data, was apparently dishonest about it, and made other mistakes and omissions in her report — undermined Dr. Humphrey’s credibility to the extent that she could not effectively defend her testing and conclusions before the jury. Second, Dr. Humphrey was distressed by the trial court’s suggestions that she had lied and committed perjury.

It is not apparent on this record that the trial court’s remarks were “a substantial cause” for Dr. Humphrey’s failure to return to testify for the defense. (*People v. Capers*, *supra*,7 Cal.5th at p. 1008.) Moreover, considering defense counsel’s observation that the prosecution successfully impeached Dr. Humphrey’s credibility with the jury, defendant has not established that the trial court’s remarks “deprived defendant of beneficial testimony.” (*People v. DePriest*, *supra*, 42 Cal.4th at p. 56.) We thus see no reasonable possibility that further testimony by Dr. Humphrey would have been favorable to the defense, notwithstanding any impropriety in the trial court’s remarks or their possible role in deterring her testimony. (*People v. Capers*, *supra*,7 Cal.5th at p. 1008.)

Defendant asserts the trial court committed misconduct when it threatened Dr. Humphrey and other defense witnesses. The trial court’s threat of sanctions and comments regarding Dr. Humphrey’s veracity took place outside the presence of the jury, as did its threats to Dr. Ney, Dr. Plotkin, and Hall. Although several of the remarks were excessively punitive, we cannot conclude that they amounted to misconduct when the record does not demonstrate how they might have influenced the jury or otherwise affected the trial. (*People v. Peoples*, *supra*, 62 Cal.4th at p. 790.)

For similar reasons, we reject defendant’s claim that the trial court’s research into Dr. Ney’s views on abortion was misconduct. Each of the cases defendant cites in support of her argument addressed a judicial officer injecting extrajudicial evidence into key fact finding, a circumstance not present here. Although the trial court marked material it found as People’s exhibits, they were not received into evidence and there is no indication the court’s research and questioning outside the presence of the jurors affected their consideration of Dr. Ney’s testimony or other matters in the trial. (*People v. Peoples*, *supra*, 62 Cal.4th at p. 790.)

Defendant claims the trial court’s comment about impeaching Dr. Ney’s testimony suggested to the jury that Dr. Ney might lie on the stand. The People argue that defendant forfeited the claim by failing to object at trial. Even if the claim were preserved, we would conclude that it lacks merit. It was not improper for the trial court to make a single remark to forestall additional objections by the defense and oblige the prosecutor to lay a foundation for impeaching Dr. Ney. (*People v. Monterroso* (2004) 34 Cal.4th 743, 783; *People v. Melton*, *supra*, 44 Cal.3d at p. 736.)

Citing *Deck v. Missouri* (2005) 544 U.S. 622, 630, and other shackling cases, defendant argues that when the trial court ordered her to look at a photo of her deceased children the court undermined her dignity and presumed innocence by “figuratively pointing” to her guilt in a manner akin to visibly shackling her in front of the jury. Defendant does not claim any error regarding the prosecutor’s questions and use of photographic evidence but argues that it was improper for the trial court to order her to respond to them when there were “less cruel” ways of eliciting the same information. We do not condone the trial court’s harsh tenor in addressing defendant’s apparent distress. Once defendant became a witness, however, the prosecution could attempt to impeach her credibility by confronting her with photographic evidence (cf. *People v. Batts* (2003) 30 Cal.4th 660, 693), defendant had a “duty to testify in accordance with the rules of evidence,” and it was within the trial court’s discretion to enforce that duty (*People v. Smith* (2003) 30 Cal.4th 581, 624; see also § 166, subd. (a)(6); § 1044).

Defendant also contends that during cross-examination of her penalty phase expert, Dr. Suiter, the trial court intervened to assist the prosecution and interfered with defendant’s ability to present mitigating evidence. The People argue that defendant forfeited this claim by failing to object to the trial court’s question. Assuming the issue was preserved, we find no impropriety.

Although the trial court’s question — whether Dr. Suiter would want to change his 1997 opinion in light of the charges against defendant — might appear dismissive of the doctor’s prior opinion, it is not improper when viewed in context. (*People v. Boyette* (2002) 29 Cal.4th 381, 460.) “While it is ordinarily the better practice for the trial court to let counsel develop the case, a trial court properly may ‘undertake the examination of witnesses . . . when it appears that relevant and material testimony will not be elicited by counsel.’ ” (*People v. Guerra*, *supra*, 37 Cal.4th at p. 1125.) Here, where the prosecutor appeared poised to exhaustively challenge Dr. Suiter’s prior opinion with minor details such as defendant’s high school grades, the trial court’s effort to reframe the point directly and limit argumentative questioning was not improper. (*Ibid*.; *People v. Nguyen* (2015) 61 Cal.4th 1015, 1061.)

The trial court ultimately limited prosecution efforts to impeach Dr. Suiter, allowed him to strengthen the basis for his 1997 recommendation by referencing the absence of complaints about defendant’s parenting, and provided him an opportunity to reiterate the court’s point that he did not have a “crystal ball” and to acknowledge the obvious, that he would not have made the same recommendations if he had known defendant would kill her children. In all, the result underscored Dr. Suiter’s professionalism and bolstered his testimony that defendant appeared to be a suitable caretaker before the fire.

### 3. Structural error

Defendant contends the trial judge’s conduct reflected bias and constitutes structural error.[[13]](#footnote-14) “ ‘A criminal defendant has due process rights under both the state and federal Constitutions to be tried by an impartial judge.’ ” (*People v. Peoples*, *supra*, 62 Cal.4th at p. 788.) Establishing a violation of this right requires “an objective assessment of the circumstances in the particular case” and “ ‘ “the probability of actual bias on the part of the judge or decisionmaker [that] is too high to be constitutionally tolerable.” ’ ” (*Freeman*, *supra*,47 Cal.4th at p. 996; *Rippo v. Baker* (2017) \_\_\_ U.S.\_\_\_ [137 S.Ct. 905, 907]; *Peoples*, at p. 788.) “[I]t is the exceptional case presenting extreme facts where a due process violation will be found.” (*Freeman*, at p. 1005.)

The “controlling principle” of unconstitutional bias rests on a “general concept of interests” that may prevent adjudicators from remaining “ ‘disinterested in the conviction or acquittal of those accused.’ ” (*Caperton v. A. T. Massey Coal Co.* (2009) 556 U.S. 868, 878, 880; see also *Freeman*, *supra*, 47 Cal.4th at p. 1005.) Though traditionally focused on pecuniary influences (*Freeman*, at pp. 1001–1002), the high court has explained that there may be a disqualifying interest in the outcome of criminal proceedings that “rests on the relationship between the judge and the defendant.” (*Caperton*, at p. 881.) A judge would be unlikely to remain neutral, for example, when presiding over criminal contempt proceedings involving a defendant with whom the judge had a “ ‘running, bitter controversy.’ ” (*Ibid*.) Appellate opinions we cited in *Freeman* provide additional examples of bias that reflect a judge’s relationship to the parties before it (*Freeman*, at p. 1006, fn. 4): in those cases, trial judges made inappropriate comments about women, in cases decided against women (*Catchpole v. Brannon* (1995) 36 Cal.App.4th 237; *In re Marriage of Iverson* (1992) 11 Cal.App.4th 1495), about lawyers, when the defendant was an attorney (*Hall v. Harker* (1999) 69 Cal.App.4th 836, 840–841), and about noncitizens, when one party was a foreign national (*Hernandez v. Paicius* (2003) 109 Cal.App.4th 452, 460–461).

 We therefore consider whether the trial judge’s inappropriate comments reflect a constitutionally intolerable possibility that he harbored an interest in the outcome of defendant’s trial. We conclude that they do not. The judge did not express bias toward defendant or a group to which she belonged, as in the appellate cases just cited. Nor has there been a showing of past controversy between the judge and defendant, pecuniary interests, or other “influence at issue.” (*Caperton*, *supra*, 556 U.S. at p.  884.) Ultimately, the judge’s comments disparaging the performance of defense counsel and witnesses, though highly inappropriate, did not convey an interest in defendant’s conviction or sentence; the misconduct thus falls short of the “extreme facts” that would raise an objective likelihood that the trial judge here was actually biased against the defendant. (*Freeman*, *supra*, 47 Cal.4th at p. 1005.) Accordingly, we find no structural error, and will assess the court’s misconduct for prejudice. (*People v. Abel*, *supra*, 53 Cal.4th at p. 914; *Sturm*, *supra*, 37 Cal.4th at p. 1243.)

### 4. Prejudice

We consider the cumulative effect of the trial judge’s misconduct in order to assess prejudice that may arise from a variety of factors. (*Sturm*, *supra*, 37 Cal.4th at p. 1243.) We have observed that the timing of a judge’s improper remarks may increase their potential for prejudice, such as comments made during counsel’s closing argument (*People v. Abel*, *supra*, 53 Cal.4th at p. 916) and comments that interfere with the defense presentation of evidence (*Sturm*, at p. 1241). The frequency of improper comments is another consideration. In *Sturm*, where the trial court interjected in the defense presentation of mitigation more than 30 times and made additional remarks that disparaged defense counsel and witnesses (*ibid.*), we concluded that the “numerous instances of misconduct created an atmosphere of unfairness” that contributed to prejudice (*id*. at p. 1243). We found the trial court’s misconduct in *Sturm* prejudicial, in part, because the penalty verdict “was by no means a foregone conclusion” and there was evidence the jury could have credited to reach a different outcome. (*Id*. at p. 1244.) Evidence beneficial to the defense is therefore another factor that informs our analysis. The substance of comments is also an important measure — improper remarks may be particularly prejudicial when the trial court has “interjected itself unnecessarily and inappropriately into the adversary process” or “undermined the defense theory of the case.” (*Id*. at p. 1243.)

In reviewing the record, the trial court’s disdain for and distrust of defense counsel is inescapable — as is the perception the court found evidence from Dr. Ney, Dr. Plotkin, and Hall “ ‘to be questionable, at best.’ ” (*Sturm*, *supra*, 37 Cal.4th at p. 1243.) Although we conclude that the court’s misconduct could not have altered the jury’s guilt determination, we are unable to reach that conclusion regarding the penalty trial, thus finding prejudicial misconduct that requires reversal of the penalty judgment.

#### Guilt phase

The prosecution case against defendant included her surviving son F.D. describing how she gathered his sisters together to sleep in the kitchen and insisted that F.D. join them when he resisted. Defense and prosecution experts agreed the fire was intentionally set and defendant essentially admitted starting the fire. There was also compelling evidence that just before the fire defendant sent a note to her ex-husband angrily taunting him with her plan of murder-suicide and sent a letter to her ex-boyfriend appearing to blame their breakup for her impending acts.

Defendant’s testimony that she lay down with her children, turned the oven on to warm her feet, and remembered little else, was difficult to credit. The prosecution effectively impeached defendant’s claimed memory loss with notes from a defense expert that documented defendant’s description of events, including writing letters to her ex-husband and ex-boyfriend late in the evening, driving to the post office to mail them, and holding a lighter and seeing a flash of flames.

The defense relied on the jury accepting a theory, set forth in testimony by Drs. Ney and Plotkin, that defendant may have had a seizure or suffered from a medical syndrome that caused her behavior and lack of memory. Dr. Ney was a psychiatrist with unusual credentials who had never qualified to testify as an expert regarding the medical conditions he addressed. He was cavalier, and on basic details shown to be inaccurate, in his far-reaching claims about the medical and mental health processes that might have affected defendant’s behavior. The trial court’s suggestion that Dr. Ney “just doesn’t know what he’s talking about,” though egregious, ultimately was not prejudicial given the other factors that independently, and severely, undermined Dr. Ney’s credibility — his questionable expertise, evasive and inconsistent testimony, unprofessional demeanor, substantial impeachment, and dubious claims that undermined the defense, including his suggestion that defendant was more likely to kill her children after having an abortion.

We closely examine the prejudicial effect of the trial judge’s inexcusably hostile questioning and commentary during the testimony of Dr. Plotkin, who was potentially more credible than Dr. Ney. Dr. Plotkin found evidence to suggest that defendant had a seizure on the night of the fire. If true, it was possible that she was unaware of some of her actions due to a seizure-induced delirium. Dr. Plotkin also explained, however, that a person in a delirium would not be capable of complex behavior and thought.

The evidence that defendant deliberately set a fire to kill her family included testimony that she planned ahead to compel her children sleep together on the kitchen floor, wrote letters indicating that she intended to kill herself and her children, drove to the post office to mail her letters, and intentionally poured and lit gasoline throughout the house. Confronted with this evidence on cross-examination, Dr. Plotkin agreed that a person could not engage in such activities while experiencing delirium. Under these circumstances, even if the jury fully credited Dr. Plotkin’s testimony, it did not offer a theory that reduced defendant’s culpability.

The trial judge’s misconduct included pervasive mistreatment of defense counsel that began at the outset of trial. The judge disparaged defense counsel during his opening statement for suggesting that defendant had demons to overcome. The timing of those remarks and their substance — sarcasm about defendant’s troubled history — increased their potential for prejudice. (*People v. Abel*, *supra*, 53 Cal.4th at p. 916.) The many inappropriate remarks that followed focused on defense counsel’s violation of court rules, lack of preparation, and improper cross-examination of prosecution witnesses; and disparaging and erroneous comments about defense counsel’s discovery violations also suggested that the defense was trying to obstruct the prosecution. Nonetheless, the improper comments were not as numerous as in *Sturm*, and the misconduct did not directly implicate defense theories or interfere with the presentation of defendant’s case-in-chief. (Cf. *Sturm*, *supra*, 37 Cal.4th at pp. 1241, 1243.)

In *Mahoney*, *supra*, 201 Cal. 618, we concluded that the trial judge’s misconduct resulted in a “miscarriage of justice,” referring to former section 4½ of article VI of the California Constitution (*id*. at pp. 626–627) — the basis for our state harmless error standard (*People v. Watson*, *supra*, 46 Cal.2d at pp. 835–836). There, the trial judge disparaged defense counsel and witnesses and on numerous occasions “took to himself the task of examining witnesses.” (*Mahoney*, at p. 622.) The judge’s examination of witnesses focused on his belief in the defendant’s guilt, “eliminating the possibility” of defenses the witnesses might otherwise have endorsed. (*Id*. at p. 623.) Similarly, in *Sturm*, we observed that the trial court, by making more than 30 sua sponte objections to the defense presentation of evidence (*Sturm*, *supra*, 37 Cal.4th at p. 1241), “interjected itself unnecessarily and inappropriately into the adversary process”(*id.* at p. 1243). The trial court informed the jury that premeditation was a “ ‘gimme’ ” in the penalty retrial, when the lack of premeditation was central to defendant’s case in mitigation, and thus “also substantively undermined the defense theory of the case.” (*Ibid*.)

As we noted in *Mahoney*, “[t]he fact that a record shows a defendant to be guilty of a crime does not necessarily determine that there has been no miscarriage of justice.” (*Mahoney*, *supra*, 201 Cal. at p. 627.) When the trial court disparages defense counsel and witnesses and “discredits the cause of the defense” (*ibid*.) with recurring, substantive interventions, “ ‘[w]hatever the degree of guilt of [the defendant] . . . those who know the circumstances surrounding his [or her] conviction are likely to feel that the verdict resulted from the conduct of the judge and not from the evidence.’ ” (*Id*. at p. 626.)

 Although the trial judge here expressed doubts about the credibility of key defense experts and disparaged the performance of defense counsel, this was not the persistent, direct interference with the presentation of defense evidence that we saw in *Mahoney* and *Sturm*. Considering the entirety of the guilt phase evidence and argument, we are not persuaded “ ‘that the verdict resulted from the conduct of the judge and not from the evidence.’ ” (*Mahoney*, *supra*, 201 Cal. at p. 626.)

Defense counsel presented inconsistent and implausible theories that gave the jury little, if any, reason to doubt defendant’s guilt. We express no view concerning the adequacy of counsel’s performance. We simply observe that defendant has not shown that the trial judge’s inappropriate conduct was to blame for this performance or that the judge undermined defense evidence the jury might have credited to reach a more favorable result. (*Sturm*, at pp. 1243–1244; *Mahoney*, at p. 623.) Considered “in the context of the trial as a whole” (*People v. Abel*, *supra*,53 Cal.4th at p. 916), we can say under either the *Chapman* or *Watson* standards of review (*Chapman v. California* (1967) 386 U.S. 18, 24; *People v. Watson* (1956) 46 Cal.2d 818, 836) that the jury would have reached the same verdict in the absence of the court’s misconduct.

#### Penalty phase

Our prejudice inquiry is more difficult with respect to the penalty phase, where the jury’s role “is not merely to find facts, but also — and most important — to render an individualized, *normative* determination about the penalty appropriate for the particular defendant.” (*People v. Brown* (1988) 46 Cal.3d 432, 448.)

In the penalty phase closing arguments, the prosecutor highlighted evidence to counter the view that defendant had been a warm, caring person: school staff believed that defendant was overbearing and cold; a family member thought defendant’s children feared her; neighbors felt defendant lied during her divorce and tried to turn her children against Folden; and Fernando Nieves described defendant’s efforts to have F.D. removed from his custody after the fire and sent to live in another state. In seeking the death penalty, the prosecutor argued that defendant’s actions were manipulative and calculating — and that her suicide note to Folden revealed not depression, but anger, revenge, spite, and control. The prosecutor urged jurors to reject any suggestion that defendant was mentally unstable and noted that defense experts had not found evidence of psychosis when they examined her. Reiterating defendant’s plan to burn her children to death, the prosecutor argued that defendant “tried to kill herself because she knew her own crimes were so hideous she didn’t want to be around for the aftermath.”

Abandoning the position that defendant acted in an unconscious delirium, in the penalty phase defense counsel reiterated evidence that defendant was distraught over her relationships, abortion, and finances and argued that she had come “unglued.” Defense counsel portrayed defendant as an emotionally fragile woman troubled by an abusive childhood, devoted to her children, and overcome by depression and thoughts of suicide. Pointing to defendant’s intent to commit suicide as extreme mental and emotional disturbance, counsel asked the jury to show mercy for “a tortured soul who all the days of her life will have to relive an act of madness, and the . . . nightmares that go with it.”

Evidence of mental disturbance from the guilt trial, which defendant’s claim of unconsciousness had rendered superfluous, lent some support to her penalty phase argument. (See *People v. Gonzales*, *supra*, 51 Cal.4th at p. 953, fn. 34.) Defendant’s son testified that she woke the children during the fire to help them avoid breathing the smoke, a fact the defense highlighted to show defendant’s confusion after setting the fire and her desire to protect the children from it. The defense reiterated the conclusion of a prosecution expert that defendant could be vulnerable to psychotic episodes that might arise due to depression or bipolar disorder. Dr. Plotkin later noted that in addition to her depression, defendant had been diagnosed with bipolar disorder and was being treated for it in jail. The defense also highlighted research by a prosecution expert showing that most women who killed their children were not “coldhearted” but experienced psychosis, depression, and other mental health disorders. On cross-examination during the guilt phase, and contrary to her defense, defendant admitted that she had been thinking about suicide her entire life.

Defense counsel began his opening penalty phase statement by remarking on his disappointment in the jury’s guilt verdict, the challenge of appearing before the jury again after his guilt phase arguments had been rejected, and his respect for the jury’s guilt phase decision. After sustaining objections to each of counsel’s remarks as improper argument, the trial judge admonished counsel in front of the jury: “If you can’t tell us what you expect the evidence will show, sit down and don’t say anything more.”

Later in the opening statement, dismissing counsel’s insistence that he was addressing matters the evidence would establish, the trial judge sustained additional objections to improper argument when defense counsel began to comment on defendant’s relationship with her ex-husband. The judge then abruptly demanded to know, “How much more do you have?” As counsel responded — stating, “I would respectfully ask for the court’s indulgence. I am trying to put in what I believe . . .” — the court interrupted: “[D]on’t explain to me what you are trying to do. [¶] I am telling you what you cannot do. If you continue to do it, I will terminate your opening statement.” The trial judge’s display of such disregard for counsel as he made his initial plea to spare defendant’s life increased the potential for prejudice flowing from the judge’s comments. (*People v. Abel*, *supra*, 53 Cal.4th at p. 916.)

As noted earlier, in comments before the jury during the guilt phase, the trial judge ridiculed defense counsel, portrayed him as wasting the jury’s time, highlighted his violation of court rules, accused him of purposely misleading the jury, and announced the imposition of a monetary sanction. The trial judge suggested that a key defense expert did not know what he was talking about, and his hostile questioning led another defense expert to remark that the defense experts were made out to be liars. Though we concluded that this misconduct was not prejudicial in the guilt phase, it undoubtedly impressed upon the jury the court’s disdain and served to “discredit[] the cause of the defense.” (*Mahoney*, *supra*, 201 Cal. at p. 627; *People v.* *Woodruff*, *supra*, 5 Cal.5th at p. 768.)

In the penalty phase, the trial judge continued to impugn defense counsel’s performance and cited him for misconduct and contempt in front of the jury. We have observed that when a judge regularly denigrates the performance of counsel “ ‘it is not the lawyer who pays the price, but the client.’ ” (*Sturm*, *supra*, 37 Cal.4th at p. 1240; cf. *Sacher v. United States* (1952) 343 U.S. 1, 10 [to “pronounce [a lawyer] guilty of contempt is not unlikely to prejudice his client”].) When defendant’s friends testified, the prosecution exhibited pictures of the deceased victims and mocked the witnesses for voicing fondness, admiration, and sympathy for defendant following her conviction. The trial judge appeared to echo this contempt when he chastised Carl Hall and accused him of wrongdoing.

The trial judge erroneously sustained objections to questions that sought to bolster the testimony of a chaplain attesting to defendant’s remorse for the crimes; the judge also repeatedly and erroneously sustained objections to questions about defendant’s nonviolence and the value she brought to the lives of others. The “very act” of sustaining those objections “tended to mislead the jury” (*People v. Hill* (1992) 3 Cal.4th 959, 1009) — by minimizing defendant’s mitigating evidence and communicating that defendant’s valued attributes were “not worth considering” (*Sturm*, *supra*, 37 Cal.4th at p. 1239). The trial judge’s hostility and impatience with the defense were further evident in the judge’s erroneous exclusion of whole categories of mitigating evidence — Dr. Boone’s testimony regarding defendant’s neuropsychological test results and cognitive impairment and PET scan results portraying brain injury consistent with defendant’s childhood traumas and neuropsychological testing.

The trial court also improperly instructed the jury to consider the “weight and significance” of defendant’s failure to provide timely discovery concerning eight of twelve penalty phase witnesses — an error we earlier found harmless when viewed in isolation. Because the trial court repeatedly chastised defense counsel and expressed doubts about the defense, however, the erroneous instruction and improper aggravating factor were apt to contribute to the perception that defendant was manipulative and that her mitigating evidence was not to be trusted. (*Sturm*, *supra*, 37 Cal.4th at p. 1243.)

During defense counsel’s closing argument, the trial judge unnecessarily remarked about defense counsel misstating the law and admonished the jury to disregard counsel’s argument that aspects of defendant’s background were mitigating. The judge later gave a cautionary instruction that gratuitously implied that defense counsel was improperly characterizing the case in mitigation. As with the judge’s remarks during counsel’s opening statement, the timing of these interventions increased their prejudicial effect. (*People v. Abel*, *supra*, 53 Cal.4th at p. 916.)

“Considered in the aggregate,” the impact of the trial judge’s misconduct grew as his inappropriate comments continued throughout the trial; the judge’s improper remarks also increased in frequency during the short span allowed for the penalty trial — not quite five days from start to finish — and included threats and disparaging comments whose timing interfered with both the opening statement and closing argument for the defense. (*Sturm*, *supra*, 37 Cal.4th at p. 1243.) Ultimately, the trial judge’s conspicuous disdain for defense counsel and witnesses, and his repeated references to their improper or untrustworthy conduct, lent credence to the prosecution’s argument that defendant was manipulative and deceitful. These were the very characteristics the prosecution highlighted to justify the death penalty. The trial judge effectively threw “the weight of his judicial position” (*Mahoney*, *supra*, 201 Cal. at p. 627) behind the prosecution’s case and erroneously excluded relevant and potentially beneficial mitigating evidence, thus “undermin[ing] the defense theory of the case.” (*Sturm*, at p. 1243).

We rely on a capital sentencing jury to “confront and examine the individuality of the defendant” and consider any “ ‘compassionate or mitigating factors stemming from the diverse frailties of humankind.’ ” (*Caldwell v. Mississippi* (1985) 472 U.S. 320, 330.) That critical function was compromised here, where “numerous instances of misconduct created an atmosphere of unfairness and were likely to have led the jury to conclude that ‘the trial court found the People’s case against [defendant] to be strong and [defendant]’s evidence to be questionable, at best.’ ” (*Sturm*, *supra*, 37 Cal.4th at p. 1243.)

We consider how the jury “might have responded differently” (*People v. Smith* (2015) 61 Cal.4th 18, 60) in undertaking its sentencing decision in a trial unaffected by such misconduct. It is not difficult to imagine the horror a jury might feel in response to defendant’s actions. Nonetheless, a juror could regard the stunning enormity of the crime, and the fact that defendant intended to take her own life, as a sign of significant mental instability. Absent the trial judge’s persistent, disparaging remarks, a juror might have viewed these circumstances with greater sympathy and concluded the crime was a tragedy lacking the moral culpability to warrant death. A juror might also have given greater weight to defendant’s remorse and evidence she had been a loving mother to conclude that life in prison, confronted each day with what she had done to her children, was a fitting punishment. Although we cannot be certain the jury would have reached a different verdict in the absence of the judge’s commentary, we are unable to say the penalty “verdict was ‘ “surely unattributable” ’ to the trial court’s [misconduct].” (*People v. Grimes* (2016) 1 Cal.5th 698, 723.) Instead, we find “a ‘reasonable (i.e., realistic) possibility’ ” (*ibid*.) that the outcome would have been different without the weight of judicial authority favoring the prosecution and hence we must set aside the judgment of death.

## E. Cumulative Error

Defendant contends that claims considered harmless in isolation are nonetheless cumulatively prejudicial. We have found or assumed seven errors: (1) erroneous guilt phase instructions regarding discovery violations; (2) error limiting mental state testimony by defense experts in the guilt phase; (3) exclusion of a neuropsychological expert in the penalty phase; (4) exclusion of defendant’s PET scan results from the penalty phase; (5) exclusion of mitigating evidence from lay witnesses; (6) erroneous penalty phase instructions regarding discovery violations; and (7) judicial misconduct, which we have concluded was prejudicial in the penalty phase.

Regarding the guilt phase, we have held that the erroneous discovery violation instruction and limitation on expert testimony were harmless when considered individually. We concluded that experts were not prevented from addressing the bulk of information the defense sought to convey and that the erroneous instruction did not affect the outcome of this trial. Considered cumulatively, these errors do not warrant reversal of the guilt judgment.

Although we need not address the cumulative effect of penalty phase errors given our resolution of the judicial misconduct claim, we note that the prejudicial impact of additional penalty phase errors — the improper exclusion of a neuropsychological expert, PET scan results, and mitigating testimony from lay witnesses, and the erroneous instruction related to penalty phase discovery violations — increases when considered in conjunction with the judicial misconduct, an effect we have noted in our prejudice discussion for that claim.

## F. Restitution

Defendant contends the trial court violated her rights to due process and to confront evidence against her when, in her absence, it imposed a restitution fine and ordered payment of victim restitution. She claims the trial court further erred by failing to make findings concerning her ability to pay.

During defendant’s sentencing, the trial court neglected to impose a restitution fine required by section 1202.4, subdivision (b) or order direct victim restitution as required by section 1202.4, subdivision (f). Defendant was not present at subsequent hearings that addressed restitution: one in which the trial court imposed a maximum $10,000 fine, and another in which the court ordered victim restitution of $24,579.99 regarding claims already filed and left some future claims to be determined. There were no reasons given for defendant’s absence and no indication she waived her presence at the hearings. Defense counsel opposed the restitution fine, citing defendant’s inability to pay, and challenged the direct victim restitution on several bases, including by offering a showing that victims’ family members had already received payments from life insurance policies maintained by defendant.

A criminal defendant has a “constitutional and statutory right to be present at [a] sentence modification hearing and imposition of sentence.” (*People v. Robertson* (1989) 48 Cal.3d 18, 60; see also Cal. Const., art. I, § 15; Pen. Code, §§ 977, subd. (b)(1), 1193.) We have acknowledged restitution as “a significant aspect of a criminal sentence.” (*Briggs v. Brown* (2017) 3 Cal.5th 808, 831; see also *People v. Tillman* (2000) 22 Cal.4th 300, 301 [judgment of conviction includes restitution fine]; cf. *Oregon v. Ice* (2009) 555 U.S. 160, 171 [sentencing determinations include “statutorily prescribed fines and orders of restitution”].) And we have confirmed defendant’s right to be present when the trial court imposes restitution. (See *People v. Frederickson* (2020) 8 Cal.5th 963, 1027 [striking restitution not imposed in open court and in defendant’s presence].)

The People argue that any rights defendant had to be present at either of the restitution hearings were forfeited by defense counsel’s failure to object to her absence. A defendant may waive her constitutional right to be present for sentencing “as long as [her] waiver is voluntary, knowing and intelligent.” (*People v. Davis* (2005) 36 Cal.4th 510, 531.) “[A] defendant’s statutory ability to waive [her] presence in a capital case is more circumscribed than the associated ability to waive [her] constitutional right.” (*People v. Rundle* (2008) 43 Cal.4th 76, 135.) There is no indication that defendant made any valid waiver of her right to be present, and counsel’s failure to object does not forfeit the claim. (*People v. Penunuri* (2018) 5 Cal.5th 126, 162.)

We therefore consider whether the error prejudiced defendant. (*People v. Penunuri*, *supra*, 5 Cal.5th at p. 163; *People v. Davis*, *supra*,36 Cal.4th at p. 532.) The People observe defense counsel was present at both hearings, raised defendant’s inability to pay the restitution fine, and disputed payment of victim restitution, and they assert that defendant would not have made any additional contributions if present. Defendant claims that she was in the best position to address her ability to pay and details about her life insurance policy.

There is nothing in the record to indicate that defendant would have added any significant information about her inability to pay beyond that presented by defense counsel. Defense counsel received notice of the proposed victim restitution almost two months prior to the hearing and thus “had ample opportunity to discuss the contents with defendant and to seek [her] assistance . . . . Assuming [counsel] did so, defendant’s presence at the hearing would have added little to [her] attorney[’s] ability to argue” the propriety of the victim restitution payments. (*People v. Davis*, *supra*,36 Cal.4th at p. 533.) We conclude that defendant’s absence from the restitution proceedings was therefore harmless beyond a reasonable doubt.

We also reject defendant’s contention that the trial court erred by failing to make findings regarding her ability to pay. Defendant cites *People v. Richardson* (2008) 43 Cal.4th 959 in support of her claim; however, the reference to findings in that case concerned requirements that had been repealed and are inapplicable here. (*Id.* at p. 1038.) The provisions of section 1202.4 in effect at defendant’s trial, as now, state that “[e]xpress findings by the court as to the factors bearing on the amount of the fine shall not be required.” (§ 1202.4, subd. (d).) “[T]he absence of any findings does not demonstrate [the court] failed to consider this factor. Thus, we cannot say on this record that the trial court abused its discretion.” (*People v. Gamache*, *supra*, 48 Cal.4th at p. 409.)

Defendant further claims the trial court failed to consider her ability to pay when ordering direct victim restitution. This argument fails because section 1202.4 provides that inability to pay shall not be a consideration in determining the amount of a restitution order. (§ 1202.4, subd. (g).)

# Disposition

We reverse the death sentence and affirm the judgment in all other respects.

**CANTIL-SAKAUYE, C. J.**

**We Concur:**

**CORRIGAN, J.**

**LIU, J.**

**CUÉLLAR , J.**

**KRUGER, J.**

**GROBAN, J.**

**JENKINS, J.**

*See next page for addresses and telephone numbers for counsel who argued in Supreme Court.*

**Name of Opinion**  People v. Nieves

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**Procedural Posture** (see XX below)

**Original Appeal** XX

**Original Proceeding**

**Review Granted** **(published)**

**Review Granted (unpublished)**

**Rehearing Granted**

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**Opinion No.** S092410

**Date Filed:** May 3, 2021

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**Court:** Superior

**County:** Los Angeles

**Judge:** L. Jeffrey Wiatt

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1. All further statutory references are to the Penal Code unless otherwise indicated. [↑](#footnote-ref-2)
2. Given his shared surname with defendant, we will refer to Fernando Nieves by his first name to avoid confusion. [↑](#footnote-ref-3)
3. Any error in excluding a prospective alternate juror for his or her views on capital punishment is harmless beyond a reasonable doubt when no alternate juror participates in jury deliberations. (*People v. Jones* (2012) 54 Cal.4th 1, 44–45.) [↑](#footnote-ref-4)
4. At the time of defendant’s trial, Code of Civil Procedure former section 223 dictated voir dire be conducted by the trial court, with supplemental questioning from the parties allowed upon a showing of good cause; later amendments to the statute allowed “each party an expanded but not unlimited right to examine prospective jurors through direct oral questioning.” (*People v. Salazar*, *supra*, 63 Cal.4th at p. 233, fn. 10.) [↑](#footnote-ref-5)
5. Evidence Code section 913 provides that no comment can be made or inference drawn from the invocation of a privilege not to testify or to disclose any matter. (Evid. Code, § 913, subd. (a).) [↑](#footnote-ref-6)
6. Section 28 allows for the admission of evidence of mental impairment related to whether the accused “actually formed” a required mental state (§ 28, subd. (a)), but section 29 prohibits expert testimony on that question (§ 29). [↑](#footnote-ref-7)
7. We address *post*, in part II.C.1.b., defendant’s claims regarding the exclusion of PET scan evidence in the penalty phase. [↑](#footnote-ref-8)
8. Formerly known as the *Kelly-Frye* rule, based on the rulings of *People v. Kelly* (1976) 17 Cal.3d 24 (*Kelly*) and *Frye v. United States* (D.C. Cir. 1923) 293 F. 1013, the rule is now the *Kelly* rule in California after changes to the Federal Rules of Evidence that superseded *Frye*. (*People v. Bolden* (2002) 29 Cal.4th 515, 545.) [↑](#footnote-ref-9)
9. The full instruction provided the following: “Also a slightly different issue, and I gave you an instruction on this, I believe, last week. [¶] That is that the prosecution and defense are required to disclose to each other before trial evidence each intents to present at the trial so as to promote the ascertainment of truth, save court time, and avoid any surprise which may arise during the course of the trial. [¶] Concealment of evidence and delay in the disclosure of evidence may deny a party a sufficient opportunity to subpoena necessary witnesses or produce evidence which may exist to rebut the non-compliant party’s evidence. [¶] Disclosure of evidence is required to be made at least 30 days in advance of trial. Any new evidence discovered within 30 days of trial must be disclosed immediately. [¶] In this case, the defendant has concealed and failed to timely disclose evidence regarding witness statements — witness statements of Debbie Woods, Rhonda Hill, Al Lucia, Penny Lucia, Delores Morris, and Aunt Lenore. [¶] Although this concealment and failure to timely disclose evidence was without lawful justification, the court will, under the law, permit the production of this evidence during the trial. [¶] The weight and significance of any concealment and delay of disclosure are matters for your consideration. [¶] However, when you do start to deliberate in this case, you should consider whether the concealed and untimely disclosed evidence pertains to a fact of importance, something trivial, or subject matters that are established by other credible evidence.” [↑](#footnote-ref-10)
10. The trial judge is now deceased. [↑](#footnote-ref-11)
11. After the jury returned with a death sentence, the trial court set aside all pending sanctions and contempt proceedings against defense counsel, except the first, noting that “given the jury’s verdict in this case, I think that’s probably enough.” [↑](#footnote-ref-12)
12. The People do not assert forfeiture of misconduct claims premised on the trial court’s allegedly disparaging treatment of defense counsel. Although defense counsel did not object to each instance of claimed misconduct, or objected only generally, the discord between the trial judge and defense counsel, and the number of admonitions and remarks at issue, would have made it “unfair to require defense counsel to choose between repeatedly provoking the trial judge . . . or, alternatively, giving up his client’s ability to argue misconduct on appeal.” (*Sturm*, *supra*, 37 Cal.4th at p. 1237.) On this record, we conclude the claim is preserved. [↑](#footnote-ref-13)
13. In addition to asserting violation of her constitutional rights, defendant references her statutory right under Code of Civil Procedure section 170.1. This statutory right to impartiality is raised through a motion to disqualify an assertedly biased judge (Code Civ. Proc., § 170.6), the resolution of which is reviewable only by writ of mandate (Code Civ. Proc., § 170.3, subd. (d)). (*People v. Peoples*, *supra*, 62 Cal.4th at p. 786; *People v. Freeman* (2010) 47 Cal.4th 993, 999–1000.) (*Freeman*).) Because section 170.3, subdivision (d) provides the exclusive procedure for resolving statutory claims, we address only defendant’s constitutional due process contention. (*Peoples*, at p. 787.) [↑](#footnote-ref-14)