

At Karen Read trial, forensic evidence has moved to the fore

By [Travis Andersen](#) Globe Staff, Updated June 19, 2024, 11:38 a.m.



Karen Read in the courtroom on Monday. PAT GREENHOUSE/GLOBE STAFF

As prosecutors near the end of their murder case against Karen Read, forensic evidence has taken center stage, with experts testifying about DNA found on tailight fragments from Read's SUV, the nature of John O'Keefe's arm injuries, and the timing of a Google search about hypothermia.

Prosecutors say the evidence shows that Read, 44, rammed her Lexus SUV into [O'Keefe](#), a Boston police officer, after dropping him off outside a Canton home early on Jan. 29,

2022, following a night of bar-hopping and heavy drinking. She returned to the scene hours later and found O’Keefe’s snow-covered body on the front lawn, [repeatedly shouting “I hit him”](#) in the presence of first responders, [witnesses have testified](#).

[Attorneys for Read](#) say she’s being framed and that O’Keefe entered the Fairview Road home, where he was fatally beaten in the basement and possibly attacked by a German shepherd mix before his body was planted on the lawn. People inside the home have testified that neither Read nor O’Keefe came inside.

As the trial wraps up its eighth week in Norfolk Superior Court, here’s a breakdown of some of the key physical and digital forensics that’ve been presented so far.

Taillight, hair DNA

Authorities have said Read’s right taillight was shattered when she struck O’Keefe, and that pieces of glass and red and clear plastic were found near his body. A hair sample was also recovered from the bumper, according to witnesses.

Tess Chart, a DNA analyst with a lab in Virginia, [testified](#) last week that the hair’s mitochondrial DNA profile was “consistent with” O’Keefe’s DNA and that analysts could exclude at least 99.8 percent of the population from being the source.

Chart’s colleague, Nicholas Bradford, told jurors he tested multiple items, including a piece of broken taillight found at the scene and DNA samples from two investigators on the case.

He said the lab determined “strong support” for O’Keefe’s DNA being present on the piece of taillight and strong support for the investigators’ DNA being excluded. The exclusion of their DNA is significant because Read’s lawyers allege that investigators planted evidence and tampered with Read’s SUV after seizing it.

To support that argument, Read's attorneys have cited [abnormalities in the video footage](#) of her SUV Lexus being processed inside the Canton police department garage, [issues with the chain of custody](#) of certain pieces of evidence, including O'Keefe's clothing, and alleged bias against their client from investigators with social ties to witnesses in the case, as demonstrated by a State Police [trooper's crude text messages](#) about Read to friends and coworkers.

Disputed Google search

Ian Whiffin, a product manager at Cellebrite, a digital forensics firm, [testified Monday](#) about a disputed timestamp on a Google search made by Jennifer McCabe, who was with Read when she discovered O'Keefe's body in heavy snow.

McCabe, whose sister lived at Fairview Road, previously told jurors that she searched, "hos long to die in the cold," which contains a typo in the first word, shortly after 6:30 a.m at Read's insistence.

Read's defense team has long asserted that cellphone records show the search was made shortly before 2:30 a.m., by which point Read had returned to O'Keefe's home.

But Whiffin said that time indicated when McCabe first opened her browser tab to search for a youth sports program, not when the hypothermia searches were made.

"I have no doubt that the only time those two Google searches were conducted" were at 6:23 a.m. and 6:24 a.m., Whiffin said.

Arm injuries

Without the jury present Tuesday, [Judge Beverly Cannone](#) heard [testimony](#) from Dr. Marie Russell, a retired emergency room physician and forensic pathologist, to determine whether she'll allow Russell to testify before the jury as a defense expert. Cannone said she'll issue a ruling by Thursday.

Russell testified that the cuts and scratches on O'Keefe's right arm were "consistent with a large dog attack," citing "parallel wounds" on his arm she said could have been caused by scratches or teeth, as well as an "unusual pattern" of at least four cuts near his wrist that could have come from the front of a canine's mouth.

Last month, prosecutors [sought to undercut the defense's dog bite theory by calling Teri Kun](#), a California veterinary forensic specialist, to the stand. She told the jury that prosecutors sent her lab swabs taken from O'Keefe's shirt to test for possible dog DNA.

Kun said results were negative for "canine DNA," though "for both the swabs we did see pig," which she indicated could have come from food such as cooked pork or bacon.

Report commissioned by FBI

Also Tuesday, Cannone heard testimony out of the jury's presence from representatives of ARCCA, a Pennsylvania-based accident reconstruction company the FBI hired as part of [a federal investigation into the state law enforcement handling of the Read case.](#)

The analysts did not discuss their findings in detail Tuesday, but Read's attorneys have said a sealed report on their work provided to prosecutors and defense counsel before trial found O'Keefe's [injuries were "inconsistent" with being struck by a motor vehicle.](#) Prosecutors have countered that the analysts essentially found the injury to the back of O'Keefe's head wasn't caused by a motor vehicle, something the government has never alleged.

Read attorney Alan Jackson said the experts are highly qualified to attest that there's "insufficient evidence to determine" the cause of O'Keefe's skull and head injuries.

"It's well within their purview to testify to that," Jackson said.

Prosecutor Adam Lally said he didn't think "that was their actual opinion" about O'Keefe's injuries. Cannone said she'll decide about the proposed testimony by Thursday.

Legal experts weigh in

Martin G. Weinberg, a renowned criminal defense attorney based in Boston, said via email that the evidence presented to date presents challenges for both sides.

"Jurors expect impartiality and professionalism in a murder investigation," Weinberg said in reference to [Trooper Michael Proctor's text messages](#). "When they see dehumanization of a defendant and a failure to faithfully follow proper practices, acquittals can occur — and should occur."

He said that whether "the evidence skillfully elicited by the defense outweighs the strength of the prosecution presentation – its forensic evidence – is one question but whether the defense risks its credibility by strongly embracing the counter-narrative of violence in the home is another,."

Mark J. Geragos, a criminal defense lawyer in Los Angeles who has represented a host of celebrities, said the forensic evidence has been overshadowed by the police misconduct.

"The forensics battle, while interesting to jurors, will hardly negate the outright corruption already exposed," Geragos said in an email. "As a practical matter jurors tend to cancel out the bought and paid for experts and really focus on what they think actually

happened and use the expert to support that determination.”

Neema Rahmani, a former federal prosecutor who also served as enforcement director of the Los Angeles City Ethics Commission, said the police misconduct that has come to light could overshadow the prosecution’s case.

“There is plenty of evidence of motive (Read’s anger and jealousy) and forensic evidence that Read struck O’Keefe with her vehicle (shattered taillight, broken glass, and hair on her vehicle),” Rahmani, a commentator on the trial for Court TV, said by email.

“Normally, this would be an open-and-shut case of vehicular manslaughter at best, or intentional murder at worst.”

Rahmani said Proctor, the lead investigator in the case, “was a terrible witness in terms of likability and credibility. His text messages about Read were unprofessional and downright offensive. He was evasive or even lied on the stand when he talked about his relationship with the Alberts [who owned the Fairview home].”

When the lead investigator is so compromised, Rahmani said, “that may give rise to conspiracy theories about a law enforcement cover-up, planting evidence, and reasonable doubt. This reminds me of [Mark Fuhrman and the O.J. Simpson case](#), without the racism.”

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