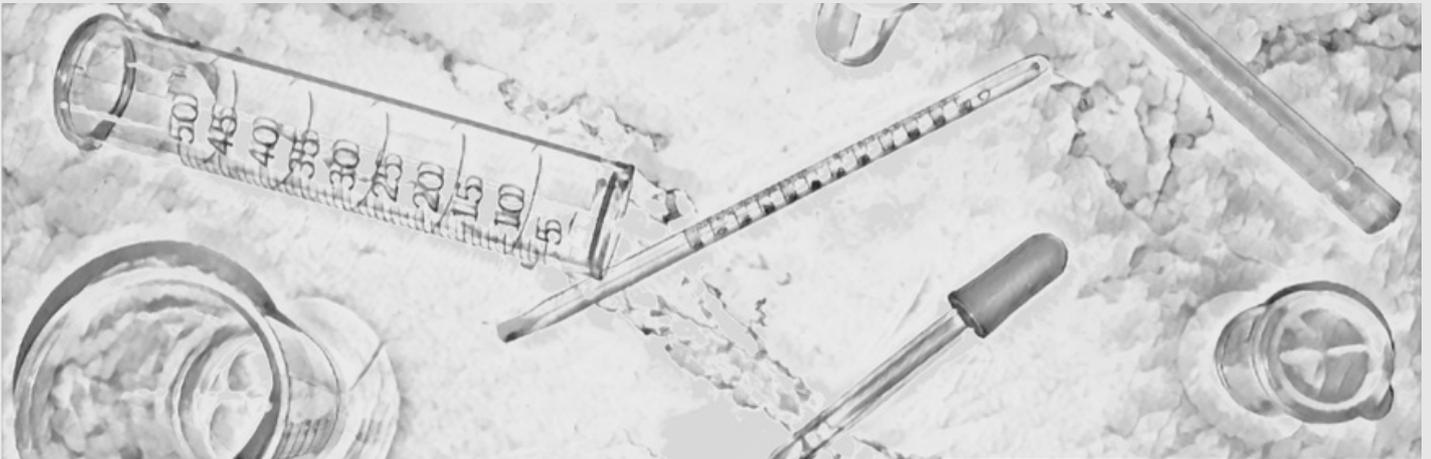


INTEGRITY

The Center for Integrity in Forensic Sciences Newsletter



Cases

in 1997, Barry Van Treese was murdered at the Best Budget Inn motel he owned in Oklahoma City, OK. The manager of the motel, Richard Glossip, is currently set to be executed on February 16th for commissioning the murder of Van Treese, a crime he almost certainly did not commit.

It was said that Glossip hired Justin Sneed, a tenant, working at the motel in exchange for free lodging, to murder and rob the motel owner for a large amount of cash he often kept on him. Sneed confessed to the murder, but likely implicated Glossip to avoid the death penalty himself.

To learn more about this case listen to the Wrongful Conviction Podcast episode #210 or watch the documentary "Killing Richard Glossip" on Discovery+.



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EVERY DONATION BRINGS US THAT MUCH CLOSER TO A FAIR LEGAL SYSTEM.

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NIST Bitemark Report

The National Institute of Standards and Technology has actively been reviewing the scientific foundations of bitemark analysis. Bitemark analysis is the comparison of bitemarks found on a victim to the teeth of a potential suspect or biter. This review was prompted by the 2009 National Academy of Sciences (NAS) report that addressed the validity, reliability, and accuracy, of forensic sciences. The NAS report called for research in many areas including bitemark analysis.

The NIST released their draft of this report on October 11th, 2022 outlining several issues with bitemark analysis. The technique rests on the notion that individual bitemarks leave unique indents, but studies analyzing human dentition do not support the claim that each individuals' dentition is unique (Franco et al., 2015). One limitation is that many of the studies on bitemarks do not use human skin as the transferred substrate (e.g., instead use pig skin or objects), and thus have limited generalizability to human victim crimes. Setting this aside though, studies still provide weak support. In one case using cadavers as bite victims, 16% of dentition samples could not be excluded as a potential source of a single bitemark (Miller et al., 2009).

In a real case, this could mean an innocent person being matched to a bitemark that could also match 1/6th of other people's dentitions.

There is also low agreement between examiners and within the same examiner, reaching different conclusions depending on who and when they are examining a bitemark. This alone shows that bitemarks are not fully identifiable even under controlled settings.

Adding to this issue, though, are the natural conditions that affect the transference and persistence of any bitemarks. Skin is prone to distortion, so any mark left can change over time and look different on certain parts of the body. Distortion can vary depending on several factors (e.g., bite force, skin's elasticity, bruising; e.g., Lewis & Marroquin, 2015), meaning the same dentition can leave different bitemarks depending on the circumstances (Bush et al., 2009). This makes bitemarks unpredictable and unreliable.

Overall, NIST's report highlights the fundamental issues with bitemark evidence and its continued use in court. Bitemark evidence is based on a notion of uniqueness that is not supported by studies.

You can read more about this draft report and the entirety of it at this [link](#). The draft is currently open for public comments through Dec 12th. To submit comments or suggestions you may send an email to scientificfoundationreviews@nist.gov

EOY 2022

We are hard at work in one of the busiest months of the year for CIFS! December is critical to fulfilling our mission each and every day and helping the many people that rely on our resources and expertise. In order to do so, we rely on generous donations from supporters like you. Please consider a gift to CIFS in your End-of-Year giving. Your gift makes more research possible in important areas of forensic science with the goal of helping attorneys, incarcerated individuals, and the legal system as a whole. This research allows accessible resources to those who need it, including attorneys and judges.

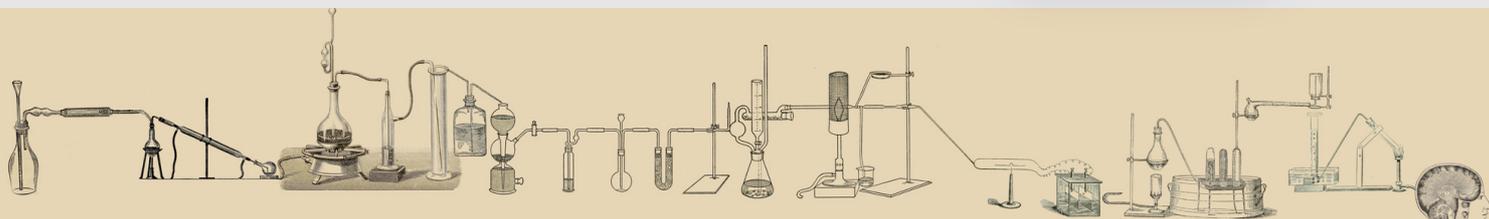
Your dollars also fund consultations that help attorneys that have

difficult forensic science cases. This helps them better advocate for their clients.

CIFS doesn't receive government funding, so our fundraising each year is made possible by individual donors like you. Last year, 84% of donations were \$500 or less, showing the impact that individuals have when they come together and support our mission.

Together we have been able to accomplish so much. Whether it's getting a client released from prison or writing an amicus brief that leads to an exoneration, our supporters have made this possible. Thank you!

[**DONATE**](#)



FROM THE EXECUTIVE DIRECTOR

The end of the calendar year is an excellent time to reflect upon the prior twelve months and to plan for the new year ahead. This year, we celebrate our successes, anticipate exciting developments, and look forward to continuing to strive toward justice and fair trials for all.

One exciting development in our sector is the NIST bite mark report. It is gratifying to see more recognition of bad forensic sciences and calls for reform. But there's still plenty of work to be done; bite marks continue to be admissible in our courts and it's time for that to change!

It's also time for more decision-makers to recognize the striking similarities between bite mark matching and other forensic science disciplines. Far too much forensic evidence rests upon the same unsafe foundations as bite mark matching. We look forward to educating folks about these similarities in the year to come.

We are also all extremely gratified by all the support from our friends around the world. Thank you all for your support, your gifts, and your continuing desire for justice!