

# INNOCENCE PROJECT



## **Statistical Analysis of Forensic Odontologist Involvement In Cases of Wrongful Bite Mark Convictions and Indictments**

The misapplication of forensic sciences is a leading contributing factor to wrongful conviction,<sup>1</sup> and of the unvalidated techniques that have contributed to wrongful convictions and indictments later overturned through DNA testing, bite mark comparison poses an acute threat to the reliability and fairness of the criminal justice system. Of the 28 known wrongful convictions and indictments secured through the use of bite mark comparison evidence, the forensic dentist(s) who performed the comparisons are known in all but two cases (i.e., the wrongful conviction of Greg Wilhoit in Oklahoma, and the wrongful arrest of Dane Collins in New Mexico). Among those 26 cases with available data, a total of 20 dentists offered bite mark comparison opinions or testimony.<sup>2</sup> Eighty-five percent (85%), or 17, of those dentists were Diplomates of the American Board of Forensic Odontology.<sup>3</sup> The raw data is presented below in Chart 1; ABFO Diplomates are highlighted in yellow. A brief statistical analysis is offered in Chart 2.

For more information on the known wrongful bite mark convictions and indictments, see The Innocence Project, *Description of Bite Mark Exonerations*.<sup>4</sup>

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<sup>1</sup> The Innocence Project, *Unvalidated or Improper Forensic Science*,

<http://www.innocenceproject.org/causes/unvalidated-or-improper-forensic-science/>.

<sup>2</sup> Eight forensic odontologists participated in multiple cases of wrongful conviction and/or indictment. Conversely, several cases involved multiple dentists.

<sup>3</sup> *American Board of Forensic Odontology Diplomat Information*, Updated 9/25/16, available at <http://www.abfo.org/wp-content/uploads/2013/02/ABFO-Diplomate-Information-revised-9-29-2015.pdf>.

<sup>4</sup> Available at <http://www.innocenceproject.org/wp-content/uploads/2016/03/Description-of-Bite-Mark-Exonerations-as-of-July-2016-1.pdf>.

Chart 1: Wrongful Bite Mark Convictions and Indictments by Odontologist and ABFO Diplomat Status

<b>Forensic Odontologist</b>	<b>Wrongful Convictions and Indictments</b>	<b>ABFO Diplomat Status</b>
1. Lowell Levine	-Keith Harward -Edmund Burke	Diplomate
2. Alvin Kagey	-Keith Harward	Diplomate
3. Lowell Johnson	-Robert Lee Stinson	Diplomate
4. Raymond Rawson	-Robert Lee Stinson -Ray Krone	Diplomate
5. Ira Titunik	-Gerard Richardson -Edmund Burke	Diplomate
6. Robert Barsley	-Willie Jackson	Diplomate
7. Edward Mofson	-Roy Brown	Diplomate
8. Homer Campbell	-Calvin Washington -Joe Sidney Williams -Steven Chaney	Diplomate
9. Jim Hales	-Steven Chaney	Diplomate
10. Harvey Silverstein	-James O'Donnell	Diplomate
11. Michael West	-Levon Brooks -Kennedy Brewer -Anthony Keko -Johnny Bourn -James Earl Gates	Diplomate
12. Allan Warnick	-Michael Cristini -Jeffrey Moldowan	Diplomate
13. Pamela Hammel	-Michael Cristini -Jeffrey Moldowan	Diplomate
14. John Kenney	-Harold Hill -Dan Young, Jr.	Diplomate
15. Norm Sperber	-William Richards	Diplomate
16. Richard Souviron	-Dale Morris, Jr.	Diplomate
17. Kenneth Martin	-Dale Morris, Jr.	Diplomate
18. Russell Schneider	-Bennie Starks	Not board certified
19. Carl Hagstrom	-Bennie Starks	Not board certified
20. Constantine (Gus) Karazulas	-Crystal Weimer	Not board certified

Chart 2: Statistical Summary of Cases of Wrongful Bite Mark Conviction and Indictment

Total Wrongful Bite Mark Convictions and Indictments:	28
Wrongful Bite Mark Convictions and Indictments Where Forensic Dentist(s) Are Named:	26
Forensic Dentists Involved in Wrongful Bite Mark Convictions and Indictments:	20
ABFO Diplomates Involved in Wrongful Bite Mark Convictions and Indictments:	17
Non-Board Certified Odontologists Involved in Wrongful Bite Mark Convictions and Indictments Cases:	3
Percentage of Dentists Responsible for Wrongful Bite Mark Conviction and/or Indictments With ABFO Diplomat Status:	85% (17 of 20)
Percentage of Wrongful Bite Mark Convictions and Indictments With ABFO Diplomat Involvement:	92.3% (24 of 26)