



E52 The Admissibility of Human Scent Evidence: From Bloodhounds to the Body Farm

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After attending this presentation, attendees will have a better understanding of the current case law regarding human scent evidence and the issues presented by such evidence under either a *Daubert* or *Frye* analysis.

This presentation will impact the forensic science community by giving prosecutors, defense attorneys, judges, and forensic scientists a better grasp of the legal issues presented by the proposed use of human scent identification evidence.

Dog evidence to identify the scent of a human has been offered at trial by the prosecution in a variety of cases. Some courts originally held that evidence that a tracking dog connected the defendant to some physical evidence was admissible with a proper foundation.¹ Other courts have been skeptical of dog tracking evidence as admissible evidence of guilt for a variety of reasons.² Some have felt that it was a form of hearsay while others described it as a “bloodhound myth.”^{3,4} Even before *Daubert*, there was concern about the reliability of dog scent identification.⁵ Post-*Daubert* analysis of dog scent evidence has not been positive as to human scent identification by dogs.⁶

In the recent high-profile *Casey Anthony* case, the government took human scent identification to another level.⁷ It offered the testimony of a forensic anthropologist who claimed he had perfected a process of “human decomposition odor analysis.” The police gathered air from the defendant’s car and the anthropologist used gas chromatography to conclude that 79.2% of the gases were consistent with a decomposing human body.⁸ Florida was a *Frye* state. The judge conducted a hearing and admitted the testimony, holding that as long as the technique is generally accepted, the expert’s opinion need not be. Thus, since gas chromatography and mass spectrometry are generally accepted, the expert’s claimed ability to analyze the data from those instruments need not be.⁹

The judge went even further and held that it was “common sense” that “to some extent, all of us have organoleptic expertise” and that the anthropologist “based upon his background and experience could offer testimony concerning the odor he smelled emanating from the sealed container.”¹⁰ He said that first responders and others are lay experts whose noses can detect the odor of a decomposing human body.

Because the jury acquitted Ms. Anthony, those opinions will never face appellate review. The case is; however, illustrative from a forensic science evidence viewpoint. The “human decomposition odor analysis” testimony would not be admissible under *Daubert* criteria. There are no standards, no testing, no error rate, and the theory is not generally accepted.

Admissibility seems less likely under *Frye*. Only requiring that instrumentation be generally accepted for conclusions from that data to be admissible is novel at best. Further, the idea that any first responder would have such highly developed olfactory senses that they can immediately identify the smell of a decomposing human body would strain even the most ardent rejecters of the *Kumho* case.

The *Anthony* case demonstrates the outer limits of the admission of virtually any “scientific” prosecution evidence. The outcome may also demonstrate that jurors will find it overreaching and not to be, as the judge said, “common sense.”¹⁰

References:

1. *United States vs. Gates*, 680 F.2d 1117 (6th Cir. 1982); *State vs. Roscoe*, 700 P.2d 1312 (Ariz. 1984); *United States vs. McNiece*, 558 F.Supp. 612 (E.D.N.Y. 1983); *People vs. Craig*, 86 Cal.App.3d 905 (1978).
2. *Brott vs. State*, 97 N.W. 593 (Neb.1903).
3. *State vs. Storm*, 238 P.2d 1161 (Mont. 1951)
4. *State vs. Storm*, *supra*: McWhorter, J.C., *The Bloodhound as Witness*, 54 Am. L. Rev.109 (1920); *People vs. Cruz*, 643 N.E.2d 636 (Ill. 1994)
5. Taslitz, Andrew E., *Does the Cold Nose Know? The Unscientific Myth of the Dog Scent Lineup*, 42 Hastings L.J. 17 (1990)
6. *Winfrey vs. State*, 323 S.W.3d 875 (Tex. Crim. App. 2010); *State vs. Dominguez*, 2011 WL 3207766 (Tex. App. 2010); *State vs. Smith*, 335 S.W.3d 706 (Tex. App. 2011).
7. *State vs. Anthony*, Ninth Judicial Circuit of Florida, Case No. 48-2008-CF-015606-O (2011), motions and orders available online at <http://www.ninthcircuit.org/news/High-Profile->



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Cases/Anthony/orders&motions.shtml.

8. *Id.*, *Motion to Exclude Unreliable Evidence* (Dec. 29, 2010).
 9. *State vs. Anthony, supra, Order Denying Motion to Exclude Unreliable Evidence* (May 7, 2011).
 10. *Id.*, at pp.19-20.
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Human Scent Evidence, Odor Analysis, Admissibility