

Blood Evidence: How DNA is Revolutionizing the Way We Solve Crimes

by Dr. Henry C. Lee and Frank Tirnady
Cambridge: Perseus Publishing, 2003 0-7382-0602-4
(Price \$26.00) pp. 338

Reviewed by Brady Hermann
Journal of High Technology Law
Suffolk University Law School

Through this piece of work, Dr. Lee and Frank Tirnady attempt to portray the quickly advancing science that is DNA fingerprinting, and show how it has affected the way crimes are solved and how such evidence is evaluated by courts and law enforcement agencies. DNA fingerprinting has reached a point where many simply take it for granted, but rely heavily on it. The authors hope to inform the readers that although DNA fingerprinting is not perfect, it has revolutionized the way we attack crime and is improving on a daily basis. The rapid speed at which DNA fingerprinting is advancing makes it utterly important that those in the legal field keep up and adapt to such advancements.

Dr. Lee is the Chief Emeritus for Scientific Services at the University of New Haven and research professor in molecular cell biology at the University of Connecticut. From 1979 to 2000 Dr. Lee was Connecticut State Chief Criminalist and has worked on over 6,000 cases. Dr. Lee was also a key witness at the O.J. Simpson murder trial, although he downplays that fact in the book. This work is Frank Tirnady's first book since graduating from the University of Connecticut School of Law.

Although the concept of differentiating DNA samples has been around for decades, it did not come into the forefront of the legal world until the late 1980's. Extensive DNA research can be documented back to the early part of the 20th century, but was not truly considered reliable enough to single handedly identify a defendant until the early 1990's. The authors take the

reader down the time line of DNA analysis and explain the scientific advancements in language that the reader can understand. More importantly, the authors keep the reader interested by giving real life examples of DNA analysis used in criminal cases during each particular time period. The authors clearly show how DNA fingerprinting has improved tenfold over the past 20 years, and how new advances have allowed investigators to use much smaller DNA samples to make a positive identification.

In addition to examples of DNA fingerprinting used in criminal cases, this book discusses many past, present, and future problems that DNA research has faced and will continue to face. Most of these problems, have required, and will continue to require the legal profession to sort out. One of the main challenges that DNA evidence faces is the accusation of contamination or wrongdoing by the investigative authorities. The authors clearly show how DNA evidence can be attacked, by explaining in depth the defense's arguments in the O.J Simpson trial in 1995. Despite what many may argue as overwhelming DNA evidence against Simpson, his lawyers were able to cast doubt in the minds of the jurors by showing very careless work done by investigators and scientists working on the case.¹ The investigators were very careless in their handling of DNA evidence which likely lead to the acquittal of Simpson.² DNA evaluation is very important, thus those in the legal profession impose very strict guidelines on how it is to be handled and evaluated because a defendant's life, or at least their freedom, is on the line. The author's description of the O.J. Simpson case shows how important it is for law enforcement

¹ Some of the mistakes that occurred were the obtaining of blood samples from the crime scene up to thirty days after the murders occurred, covering the body of Nicole Simpson with one of her own blankets from her home, and leaving Simpson's Ford Bronco unattended where one person admittedly was able to get inside and leave a note.

² Authors mentioned lab workers spilling blood samples, being unable to account for missing blood, etc.

agencies, as well as prosecutors, to adapt to the constantly changing science of DNA fingerprinting, which subsequently creates many new rules that need to be followed in order to get proper results.

It is hard to argue that advancements in DNA fingerprinting have not significantly affected the way authorities build a case against an alleged criminal, but DNA has also allowed us to do much more. All fifty states have set up DNA databases by collecting DNA samples from convicted criminals. These databases have helped solve many “cold cases” as well as quickly identify an unknown suspect even before intense investigation has begun. DNA has even helped many convicted criminals by exonerating thousands that have been wrongly convicted for a crime they in fact did not commit. Many have argued that these databases are unconstitutional and violate an individual’s Fourth Amendment right, outlawing unreasonable search and seizure. As the book explains, however, all states hearing such cases have held the databases to be constitutional.³

This book is very well written and very informative. Anyone who is interested in the field of DNA, more specifically DNA fingerprinting, should definitely read this book. At times, however, the book uses very technical and in-depth scientific language, which can be extremely hard to understand, and confusing for individuals who are not very informed in the field of DNA. Although there are times when the book is a little difficult to understand, and a little dry, the authors do a very good job at keeping the readers interested. They accomplish this by using several exciting cases that were actually solved using DNA evidence. Such examples include the discovery and identification of the body of one of the world’s most wanted men in 1985, Dr.

³Sacha Pfeiffer, “*SJC Upholds Taking DNA from Convicts, Parolees*,” Boston Globe April 14, 1999. (Court held that “the high government interest in a particularly reliable form of identification outweighs the minimal intrusion of a pinprick.”)

Josef Mengele, the infamous Nazi scientist, who tortured thousands of Jews at Auschwitz doing his own DNA research during World War II. Despite the difficult language at times, well-written descriptions and real world application keep the reader interested. This book is very intriguing as well as informative, and is a must read for anyone who is even the slightest bit interested in the field of DNA analysis and fingerprinting.