The "Starch Wars" and the Early History of DNA Profiling

REFERENCE: Aronson JD: The "Starch Wars" and the early history of DNA profiling; *Forensic Sci Rev* 18:59–72; 2006.

ABSTRACT: Just as the movie Star Wars had a prequel, so did the "DNA Wars"—the series of legal, scientific, and personal battles that took place over the admissibility of forensic DNA evidence from 1989 to 1994. Between the late 1970s and the mid-1980s, another forensic identification technique became mired in controversy: electrophoresis-based blood protein analysis. Although the debates over blood analysis were every bit as rancorous and frustrating to almost everybody involved—so much so that they became known as the "Starch Wars"—their importance has not been adequately appreciated in the recent history of forensic science. After reviewing the early history of blood typing, I will describe the development of the Multi-System approach to blood protein analysis that took place in California from 1977 to 1978. I will then elucidate the history of the Starch Wars, and demonstrate the ways that they shaped subsequent disputes over DNA evidence, especially in California. I will show that: (a) many of the forensic scientists, law enforcement officials, and lawyers who became prominent players in the DNA Wars were deeply involved in the court cases involving protein electrophoresis; and (b) many of the issues that became controversial in the disputes over DNA evidence first emerged in the Starch Wars. In the conclusion, I will suggest various ways to improve the quality of forensic science based on my analysis of the Starch Wars.

KEY WORDS: California, DNA, legal controversy, protein electrophoresis, Starch Wars.