Probabalistic genotyping: Controversial new frontier in DNA crime investigations

Cybergenetics [is] a private company that makes TrueAllele, a "probabilistic genotyping" software program[, which developers say can] remove human bias from the equation, delivering accurate, consistent results with the exactitude and cold remove of a calculator.

…

But critics worry that they undermine an important aspect of due process. The accused, defense attorneys, judges and jurors typically don't have access to the tools' often proprietary inner workings and, thus, the ability to question their conclusions. As one attorney wrote in a brief arguing that TrueAllele's developer should have to reveal and explain its source code, "The Petitioner cannot cross-examine a computer."

For the past year, ProPublica has been investigating and reverse-engineering various algorithms as part of a series called "Machine Bias." We've found that these complex pieces of software are helping to guide decisions in an ever-growing number of realms, including criminal justice, in ways that are often little understood and sometimes unfair.

…

The emergence of algorithmic analysis programs, however, is creating a new frontier of DNA science. The tools are so new and expensive that only a handful of local crime labs use them regularly. But as law enforcement looks to DNA more and more frequently to solve even minor crimes, that seems almost certain to change.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Where Traditional DNA Testing Fails, Algorithms Take Over