

### **End of Year Newsletter**

Better Justice Through Better Science <sup>™</sup>

#### **Table of Contents**

- <u>Cybergenetics would like to wish everyone Happy Holidays and a Happy New Year!</u>
- <u>TrueAllele cold case justice from New York City's "uninterpretable"</u> DNA evidence
- <u>TrueAllele helps convict Pennsylvania man using "uninterpretable"</u> DNA evidence
- Massachusetts case dismissed when TrueAllele reveals "uninterpretable" DNA is exculpatory
- <u>Cybergenetics talks to India about solving "uninterpretable" DNA with</u> TrueAllele
- Cybergenetics attended many forensic conferences in 2023
- <u>Cybergenetics deployed new TrueAllele software capabilities and</u> features in 2023

Cybergenetics would like to wish everyone
Happy Holidays and a Happy New Year!



2023 was an active year for Cybergenetics! We provided TrueAllele® products to crime labs. We invented, developed, tested, validated, and released new computational forensics software.

Cybergenetics delivered TrueAllele services to police, prosecutors, defenders, and innocence groups. We consulted on almost a hundred cases, offering free screening and issuing around fifty case reports. Our expert analysts testified in about twenty criminal cases, for both prosecution and defense. Our criminal justice involvement changed the course of many cases, bringing "uninterpretable" DNA back into play as vital evidence.

These major developments have our company ready to tackle new projects and opportunities in 2024. This success would not have been possible without all of you – our staff, collaborators, and supporters. We thank you – and wish everyone the very best for a successful and productive year ahead.

TrueAllele cold case justice from New York
City's "uninterpretable" DNA evidence



On June 10, 1995, a gas station attendant was found dead in a Brooklyn auto shop. He had been strangled with a cord around his neck. Twenty-two years later, in 2017, the New York City (NYC) Office of the Chief Medical Examiner (OCME) found a DNA mixture on the cold case cord.

But OCME couldn't interpret their DNA data. Since the lab couldn't determine the "likely number of contributors to the sample," they made "no interpretation or comparisons" with their probabilistic genotyping software. NYC failed to produce DNA match information.

L.M.'s public defender then had Cybergenetics examine OCME's "uninterpretable" DNA data. The company's powerful TrueAllele computer doesn't have the lab's limitations. On the same DNA data, the computer's match information between the cord and L.M. was 114 billion times less probable than coincidence – a strong statistical exclusion.

On June 22, 2023, Cybergenetics Casework Supervisor William Allan testified at the NYC trial about his TrueAllele results. Despite aggressive cross-examination by the prosecutor, scientific expert Allan got his accurate and objective computer message across to the jury – L.M.'s DNA was not on the cord. The Brooklyn jury delivered a full acquittal of L.M.

**Acquittal Trial Page** 

# TrueAllele helps convict Pennsylvania man using "uninterpretable" DNA evidence



In January of this year, Blair Watts reported his Pennsylvania business partner Jennifer Brown as missing. Her dead body was found in a shallow grave. When Watts misuse of Brown's funds was discovered, he became a murder suspect.

Cadaver dogs "alerted" the victim's unlocked kitchen window. Had Watts carried the victim's body through the window? A private forensic lab tested DNA from the window; the four-person mixture mainly had the victim's DNA. But "due to the limited data obtained, no conclusions could be made on the minor alleles" from the other three DNA contributors.

A mixture of victim and suspect DNA helps uncover the crime story. The mixture puts two people together in the same place, on the same window. A lab's "uninterpretable" data can be highly probative. The Montgomery County detective <u>sent the data to Cybergenetics for TrueAllele analysis</u>.

TrueAllele found support for Watts' DNA being in the window mixture. A match between a 3% window contributor and Watts was 29 times more probable than coincidence. Only 1 in 387 people would match the window as strongly as he did. In December, Cybergenetics Casework Supervisor William Allan testified before a Norristown jury. Watts was found guilty of first-degree murder and sentenced to life in prison.

#### PA v Watts Trial Page

# Massachusetts case dismissed when TrueAllele reveals "uninterpretable" DNA is exculpatory



An innocent Massachusetts man was driving near a shooting. Two firearms were found nearby. The State Police crime lab couldn't get any information from their "uninterpretable" DNA data. They couldn't run their genotyping software on very small DNA amounts. They said their three- and five-person mixtures were "not suitable for comparison due to the quality of the profile."

When a defendant's DNA isn't present in the evidence, some prosecutors will baselessly argue that <u>"uninterpretable" data implies guilt</u>. The lab's interpretation failure can translate into criminal injustice. It is essential to Know the Answer™ when DNA evidence is exculpatory.

The Public Defender sent the lab's DNA data to Cybergenetics. TrueAllele statistically excluded the defendant from both firearms. The match statistics were one over 135 million (three contributors) and one over 1.09 million (five contributors) – the defendant's DNA wasn't there. The case was

dismissed. The defense attorney thanked Cybergenetics, saying "you helped to make this happen through the work that you did."

**Inconclusive Fallacy Talk** 

### Cybergenetics talks to India about solving

#### "uninterpretable" DNA with TrueAllele





ರಾಷ್ಟ್ರೀಯ ವಿಧಿ ವಿಜ್ಞಾನ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ



On November 29<sup>th</sup>, Cybergenetics' Chief Scientist and Executive Dr. Mark Perlin delivered a half hour address at the *International Conference on Recent Trends in DNA Forensics* in Karnataka, India. His talk was entitled, "TrueAllele" computational forensics for solving 'uninterpretable' DNA mixtures". The conference was sponsored by the *National Forensic Sciences University* and the *Karnataka Institute for DNA Research* in Dharwad.

Dr. Perlin spoke about the history of Cybergenetics, our pioneering TrueAllele technology, and the impact we have made on forensic science and criminal justice. His <u>talk</u> presented homicide, mass disaster, sexual assault, and exoneration case examples. He explained how to report on information success, instead of "uninterpretable" DNA failure. He showed how TrueAllele computational forensics delivers the information and automation needed in a just society.

#### Uninterpretable Mixtures Talk

# Cybergenetics attended many forensic conferences in 2023



Cybergenetics attended a dozen <u>forensic conferences</u>, both in the United States and internationally. The company presented scientific results and exhibited at trade shows. They explained their powerful TrueAllele technology, and how it helps find truth in criminal justice by getting key identification information from "uninterpretable" DNA data.

#### American conferences included:

- American Academy of Forensic Sciences (AAFS)
- Wisconsin Association of Homicide Investigators (WAHI)
- Arizona Homicide Investigators Association (AHIA)
- Regional Organized Crime Information Center (ROCIC)
- International Symposium on Human Identification (ISHI)
- International Homicide Investigators Association (IHIA)
- California Homicide Investigators Association (CHIA)
- Illinois Homicide Investigators Association (ILHIA)
- Southeastern Homicide Investigators Association (SEHIA)

**Cybergenetics Newsroom** 

## Cybergenetics deployed new TrueAllele software capabilities and features in 2023



Cybergenetics continues to develop new TrueAllele capabilities and add powerful features to its software products. In 2023, the company:

- Released its new TrueAllele VUIer™ software (version 3.3.8663.1R20b).
- Added support for <u>Verogen NGS data</u> from the MiSeq FGx Sequencing System.
- Enabled upload of autosomal NGS from single-source or mixture STR data.
- Built a new automated NGS batch request feature for easier user workflow.
- Validated NGS for forensic use with the Kern Regional Crime Laboratory.
- Allowed data import from the Applied Biosystems SeqStudio Genetic Analyzer.

**TrueAllele NGS Validation** 

### BEST WISHES FOR A HAPPY HOLIDAY AND A WONDERFUL NEW YEAR!





**f** Share





Free TrueAllele Screening

Contact Cybergenetics today, making the impossible routine  $^{\mathsf{m}}$ 















Copyright © 2023 Cybergenetics, All rights reserved.

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.

