

2023 DNA HIT OF THE YEAR

CASE SUMMARIES

Windy Point Jane Doe

Montrose County Sheriff's Office Missing Persons Case, evolved into Homicide

"In August of 2020, Commander Ted Valerio approached me and asked to submit samples to CBI for new and advanced technology in Forensic Genetic Genealogy aka Familial DNA analysis. The cost was initially set at around five thousand dollars to submit the DNA material. The fee has since been waived. The green light was given and Investigators Dustin Harlow and Brittany Martinez submitted a letter of request to the Colorado Bureau of Investigation for analysis to acquire DNA from the remains and entering the markers into CODIS as well as NamUS. By doing this procedure it was in hope that testing would result in identifying relatives or ultimately to identify who really is "Windy Point Jane Doe" through third party analysis.

On April 19, 2022, I received a call from CBI Analyst and Forensic Lab and Cold Case Division, Audrey Simkins who asked me if I was ready for some really, really good news. CBI analyst Audrey Simkins told me that the results came back with a positive ID of Windy Point Jane was that of a missing woman from the state of Washington.

By utilizing the DNA and dental, CBI DNA Forensic Scientist DENISE VENSEL was able to process the biological evidence to determine that identity was that of SUSAN HOPPES who was reported as a missing person from Pierce County Washington on August 9, 1993.

Windy Point Jane's remains were found on July 7, 1994 on the Uncompahgre Plateau in the area of Windy Point on the Divide Road by a citizen who was hiking in the area with family. She in turn notified the Montrose County Sheriff's Office and thus the investigation began on July 8, 1994, to determine who and what happened to Windy Point Jane Doe.

Montrose County Coroner Dr. Thomas M. Canfield has made notification of next of kin to the Hoppes family.

This case is being investigated by the Montrose County Sheriff's Office and the Montrose County Coroner's Office as a homicide. As of May 10th Commander Valerio is enroute to Washington State to gather information on Susan Hoppes and to meet with Detectives and private Investigators.

Over the past 28 years there have been several investigators from different Law Enforcement agencies that were involved with the case of "Windy Point Jane Doe.

https://www.montrosepress.com/news/30-year-old-cold-case-cracked-as-windy-point-jane-doe-idd/article_5b1ae9e8-d15c-11ec-bf4c-53b38afaed7.html

Penn State Serial Rapist Brought to Justice by Genetic Genealogy

State College Police, Pennsylvania

Serial Rape Case, solved via Genetic Genealogy after no hits in CODIS

"From August 22, 2010, to July 16, 2017, a serial rapist attacked and raped four female college students near the Pennsylvania State University's Main Campus in State College, Pennsylvania. Three of the women were beaten during the assaults. Each of the victims were either 19 or 20 years old and each of the rapes occurred on the streets of State College during the evening or early morning hours. Biological evidence from the suspect linked all four rapes to the same perpetrator. One of the unique aspects of this case is that on three of the victim's, semen was collected during their examinations. On one of the four victims no semen was found but epithelial cells that sluffed off of the suspect's body onto the tights of one of the victim's was located. These epithelial cells were enough to link that suspect to the other three cases.

State College is the town that is adjacent to Penn State's Main Campus that houses many of the university's students. Penn State Main Campus has approximately 45,000 students attending classes each semester. The Pennsylvania State University is Pennsylvania's largest university that draws students from throughout the United States of America as well as the whole world. The Borough of State College has about 65,000 residents. The State of Pennsylvania has 13.1 million residents.

This case had very little physical evidence. There was no video footage, the victims' had difficulty providing an accurate description of the suspect and there were no witnesses. There was no physical evidence outside of the biological evidence that the suspect left behind. Even though the suspect's profile was developed and entered into CODIS, there was no CODIS hit. The suspect had no previous arrests.

A decision was made to use genetical genealogy to try to solve this case. After a lengthy investigation Detectives from the State College Police visited Paul and Susan Fields and informed them that they were looking for a rapist that may be in their family tree. They provided the detectives with their DNA samples. These swabs then were sent to DNA Solutions which showed that they were the biological parents of the rapists with 99.99% accuracy.

On July 21, 2020 Jeffrey Fields was arrested. A buccal sample collected from Fields at the time of his arrest was also sent to the Pennsylvania State Police Laboratory. The Pennsylvania State Police confirmed that Jeffrey Fields was the man who raped all 4 women. The chance that someone else having the same DNA as Fields was 1 in 10 quadrillion.

After his arrest, Jeffrey Fields waived his preliminary hearing and his trial. He pled guilty to almost all of the charges and was sentenced to 29 ½ years to 59 ½ years imprisonment.

DNA was the only evidence that was present in this case. If it wasn't for the collection, identification and profile being developed, in addition to the genetic genealogy work that took place, Jeffrey Fields would never have been arrested.

<http://www.cbsnews.com/pittsburgh/news/state-college-rape-investigations>

<https://www.statecollege.com/port-matilda-man...>

<https://lawandcrime.com/crime/jeffrey-fields-accused-penn-state-serial-rapist>

<https://www.statecollege.com/port-matilda-man...>

Sexual Assault Murder, Gauteng, South Africa

Forensic Pathology Service Bronkhorstspuit Gauteng, South Africa

"On 2016/10/10 at 14:00 the SAPS Bronkhorstspuit requested FPS Bronkhorstspuit to collect a body of an unknown African Female on the R42 Delmas road. A case of murder was open Cas 121/10/2016. The body was starting to decompose and body number DR 224/2016 was assigned to the unknown deceased.

On 12 October 2016 at 09:00 a post-mortem was conducted at the medical legal laboratory Bronkhorstspuit Pathologist from Pretoria. The suspicion was there that the victim was murdered and sexually assaulted. The Pathologist conducting the examination then collected DNA evidence from the genital organs by using an evidence swabs provided in the sexual assault collection kit. The evidence was received by Forensic Pathology Service Bronkhorstspuit from the Pathologist sealed and handed over to the South African Police Service for DNA investigation. This samples were sent to the Biology Lab of the SAPS and reported as urgent as there was a suspicion that a serial killer and rapist was operating in the Bronkhorstspuit area. Forensic Pathology service by law has the right to bury an unknown deceased after 30 when all avenues were taken to see if the deceased can be identified. Thus on the 19 October 2016 The victim identification unit was requested to come and collect reference DNA and fingerprints for identification purposes. The same unit was requested again to come and collect samples and fingerprints for matching to the database on 26 April 2017. The fingerprint results was available on 2017/05/23 as unknown and couldn't be determent by LCRC or Home affairs. But still the Forensic Pathology service Bronkhorstspuit decided not to bury the victim. On the other side in Alandale a debriefed mother reported her daughter missing a week after she last saw her on 09 October 2016. In February 2017 the case was escalated to a kidnaping case at SAPS Lenasia case 97/02/2017 as the suspect was a high profile Cash and Transit suspect. The suspect DNA swab was collected and send for matching to the database as urgent. In the same year between July and August 2017 to the surprise of the investigation officer a hit on the suspects DNA was reported by the SAPS biological lab. The DNA from a sexual assault kit taken at FPS Bronkhostspuit case number linked to the suspect on the kidnaping case. The investigation officer then traced the case back to FPS Bronkhorstspuit DR 224/2016 in September 2017. On 2017/09/22 a human remains id kit was collected for comparison with the mother's DNA. On 2017/09/28 a report was received from the Pretoria SAPS Lab identifying the decease."

Supporting Document

https://74097c68-6e2e-43ed-820d-a88fd0a472d8.usrfiles.com/ugd/18050b_af9a4a3cb1dd41eba2f986a77cef4f5b.pdf

<https://www.iol.co.za/the-star/news/one-of-sas-most-wanted-heist-kingpins-convicted-for-rape-murder-of-sbv-employee-5dedb613-ed04-40ae-9b39-2e64c9b0aaba>

Murderer's Girlfriend's DNA Leads to his Arrest Killing of US Coast Guard Office

Florida Department of Law Enforcement

"Caroline Schollaert was an active-duty U.S. Coast Guard member. She was assigned to the Helicopter Interdiction Tactical Squadron, which is dedicated to drug interdictions. On Tuesday, August 3, 2021, she was murdered in her driveway after interrupting a car burglar. She had the suspect at gunpoint, while on the phone with 911, ordering him to remain there until police arrived. The suspect didn't comply and pulled a gun firing multiple shots at Schollaert. She was struck and died at the scene. Several neighborhood cameras captured video of the suspect walking up to homes looking for unlocked cars. Other car burglaries from that evening, as well as car burglaries from days earlier were also caught on video. These videos showed several individuals involved along with a getaway vehicle. These cameras also captured the suspect fleeing the scene of the shooting and getting into a vehicle. Police had the suspect's image from the videos and clothing he had dropped along the flight path.

The clothing was submitted, the same day as the crime, to the Florida Department of Law Enforcement Jacksonville Regional Operations Center laboratory for the Biology section to examine. The clothing was processed and subjected to DNA analysis as soon as it arrived in the laboratory. The next morning, a male profile from the evidence was searched in Florida's CODIS. There were no matches. The profiles obtained from the clothing were mixtures. The analyst then resampled the shirt in a different area. The next round of DNA results was obtained three days after the murder. The resampling of the shirt produced a female DNA profile. Due to the shooting being linked to multiple car burglaries involving several suspects, the female profile was searched in Florida's CODIS. The profile hit to a Florida qualifying offender. Members of the Florida DNA Investigative Support Database, went into the lab on Saturday to review and confirm the search results, releasing the name to the Jacksonville lab. Detectives from Jacksonville Sheriff's Office went to the female's home the day of the DNA hit. They interviewed her, secured a warrant, and found the murder weapon and other information leading to the identification of the suspect, Tyree Parker. The murder weapon had been stolen from an unlocked vehicle 11 days prior to the shooting. Four days after the shooting, a warrant was issued for Tyree Parker.

On August 10, 2021, Tyree Parker turned himself into law enforcement. He was arrested and charged with second degree murder. His DNA profile was not the male profile previously searched in CODIS."

<https://www.legacy.com/us/obituaries/timesdispatch/name/caroline-schollaert-obituary?id=6281441>

[Caroline Schollaert Obituary \(1994 - 2021\) - Jacksonville, FL, VA - Richmond Times-Dispatch \(legacy.com\)](https://www.legacy.com/us/obituaries/timesdispatch/name/caroline-schollaert-obituary?id=6281441)

[Jacksonville Coast Guard member killed confronting thief outside home](#)

[Man who killed Jacksonville Coast Guardsman in car robbery pleads guilty \(msn.com\)](#)

IDENTIFICATION OF THE DEAD BODY OF A BABY FOUND IN A WASTE-TREATMENT PLANT

Policía Nacional Spain

On 22-05-2012 the dead body of an unidentified baby was found in the Valdemingómez waste-treatment plant (Madrid).

The baby's dead body still had the umbilical cord attached to it, for which reason DNA samples were taken from the dead body and the umbilical cord. The same genetic profile was obtained from all the samples.

The postmortem examination performed on the dead body established that the newborn girl had suffered a violent death, caused by mechanical asphyxia and severe head trauma.

After obtaining the conclusive STR genetic profile of the dead body, it was entered in the Spanish Police's DNA Data Base, which resulted in a new search tool that makes possible to obtain new possible candidates who are compatible with DNA samples that had until now remained anonymous.

On 18-08-2020 legal authorization was requested for the creation of the Pedigree Tree with the genetic profile of the baby's dead body, and for its collation with the conclusive profiles which are of interest for purposes of fighting crime and which already exist in the DNA's database.

Once the authorization was obtained the searches were triggered aimed at identifying the likely biological parents of the baby.

Compatibility with a male's conclusive genetic profile was obtained; the male had been arrested in 2011 for physical injury in Madrid, and had remained in the DNA's database since then.

Kinship analyses were conducted and, as a result, it was revealed that the said conclusive profile corresponded to that of the baby's biological father.

As a result of the biological father's identification, the judicial police units started an investigation which was aimed at the identification and location of the baby's biological mother. This investigation resulted in a woman being found, from whom a conclusive DNA sample was taken.

Once this conclusive sample of the presumed mother had been analyzed, a STR genetic profile was obtained, after which the kinship statistical analyses were performed together with those conducted on the father and the baby.

The studies conclude that this woman is the biological mother of the baby who was found dead in 2012 at Madrid's waste-treatment plant. She was arrested in 2021 after confessing, and was charged with an offence of INTENTIONAL HOMICIDE based on the above-described facts."

https://www.huffingtonpost.es/entry/detenida-una-mujer-por-matar-hace-9-anos-a-su-bebe-encontrado-en-un-vertedero_es_60797571e4b0eac4813c5c2b

https://www.huffingtonpost.es/entry/detenida-una-mujer-por-matar-hace-9-anos-a-su-bebe-encontrado-en-un-vertedero_es_60797571e4b0eac4813c5c2b

<https://www.europapress.es/madrid/noticia-encuentran-cuerpo-bebe-meses-gestacion-planta-incineradora-valdemingomez-20120718105936.html>

<https://www.elmundo.es/madrid/2021/04/16/6079713efc6c83db4b8b45df.html>

https://www.lasexta.com/noticias/sociedad/detenida-nueve-anos-despues-matar-arrojar-cuerpo-bebe-vertedero-valdemingomez_2021041660797cde8beb39000150a889.html

<https://elcierredigital.com/sucesos/359442556/resuelven-caso-bebe-muerto-vertedero-valdemingomez-2012.html> <https://www.20minutos.es/noticia/4660498/0/detenida-una-mujer-por-asfixiar-a-su-bebe-recien-nacida-y-tirlarla-a-la-basura-hace-9-anos-en-madrid/>

STABBING OF A CHILD AT A SCHOOL ENTRANCE
*Kosovo assailant who stabbed young boy in Spain
identified after no match in Spanish database
but match in UK database via Prüm*

Policía Nacional
Spain

On 10 December 2021 a 6-year-old boy was stabbed on the neck in broad daylight outside Hastings School, a British school in Madrid's Chamartín district.

The children had just finished their physical education class and were returning to the school, when suddenly a man aged between 30 and 40, who was neatly dressed according to the witnesses, sprang upon the student, who was the last in line, from the back, and threw him on the ground, stabbing him on the neck with a knife. He then fled from the place.

The wounds caused the victim to have to undergo surgery and stay on intensive care in a hospital of Madrid.

After the on-site inspection, the National Police found the knife used by the perpetrator in the place's surroundings, inside a rubbish container and wrapped in a plastic bag. The cutting weapon proved to be a knife with a 20 cm-long blade.

When the knife was sent to Madrid's DNA laboratory, the experts obtained the victim's genetic profile in the blood traces which were present on the blade, and, in addition, they obtained the profile of another male in the biological remains found on the handle.

Once the genetic profile found on the handle had been entered and collated, no coinciding profile was found in the DNA data bases of Spain. On that day and based on the international agreements related to the exchange of genetic profiles (Treaty of Prüm), the said genetic profile was distributed and collated in the corresponding European databases, which resulted in a match with a conclusive sample from Great Britain.

Information was requested to the Authorities of Great Britain regarding the said conclusive genetic profiles, after which the affiliation data and the photograph and fingerprint information of the perpetrator were received. When the information was facilitated to the investigating groups of the National Police, they could then find and arrest the perpetrator one day after his DNA-based identification.

The said perpetrator was a 32-year-old male, born in Kosovo, who had arrived in Spain one week before the attack and had criminal records in the United Kingdom."

<https://www.americanpost.news/they-arrest-a-man-with-mental-problems-after-stabbing-a-child-in-a-madrid-school/> <https://euroweeklynews.com/2021/12/11/stranger-stabs-a-seven-year-old-madrid-schoolboy-in-neck/> <https://elpais.com/espana/madrid/2021-12-23/una-prueba-de-adn-fue-clave-para-detener-al-hombre-que-apunalo-a-un-nino-a-las-puertas-de-su-colegio.html>

<https://www.elmundo.es/madrid/2021/12/22/61c352ddfdddf00758b45c9.html>
https://www.antena3.com/noticias/sociedad/hombre-apunala-cuello-nino-7-anos-cuando-salia-colegio-chamartin_2021121061b391e407c11b000103646a.html

https://www.lasexta.com/noticias/sociedad/hombre-30-anos-apunala-cuello-nino-7-anos-salida-colegio-chamartin-madrid_2021121061b3929407c11b0001036567.html

Breckenridge Hitchhiker Murders

Colorado Bureau of Investigation

"It was a cold, snowy night in Breckenridge, Colorado on January 6, 1982. In such a quaint, quiet ski resort mountain town, it was not uncommon for folks to hitchhike to get to their destination within the area. Annette Schnee (21) and Barbara "Bobbie" Oberholtzer (29) were 2 area residents hitchhiking separately in the Breckenridge area that evening.

On January 7, Bobbie's body was found off of Highway 9 near a scenic overlook near the summit of Hoosier Pass, five miles south of Breckenridge. She had been shot twice. Only two pieces of evidence were found: a set of house keys and an orange sock. Police were mystified; the keys belonged to the woman but the sock did not. Six months later and thirteen miles away, Annette's body was found, this time in Sacramento Creek near a Highway 9 side road. She had also been shot to death. Incredibly, she was wearing the matching orange sock. Both women had been shot with a medium-caliber revolver. By all accounts, they had never met. Their bodies were found thirteen miles and six months apart. However, police were certain that they were murdered on the same night by the same man.

On January 7, a farmer who lived thirty miles outside Breckenridge found Bobbie's driver's license on his property. Her husband, Jeff, went with two friends to pick up the license. On the way, they made a disturbing discovery. While driving past a field, he noticed a blue spot in the snow. It was her backpack, which she had with her when she left for work. Also found was one of her gloves, spattered with blood, and several bloody facial tissues.

The chief suspect for both murders was Bobbie's husband, Jeff. This theory was strengthened when his business card was located in Annette's wallet. Approximately two months after Bobbie's body was discovered, Jeff submitted to a polygraph test and passed. However, he remained a suspect. Jeff always maintained his innocence.

In 1995, DNA testing at Colorado Bureau of Investigation Forensic Services (CBIFS) determined that the blood on Bobbie's glove came from a male. The testing also determined that it did not belong to Jeff. As a result of this and other evidence, including several alibi witnesses, he was eventually cleared as a suspect in the murders. The unknown male DNA profile was entered into the CODIS database in 2002 where it searched for 20 years with no investigative leads generated. The CBI also performed familial searches in 2013 and 2017 - also with no investigative leads generated. Over the years, DNA standards from many suspects were tested at CBIFS and none of them matched the blood"

<https://www.9news.com/article/news/crime/murder-conviction-alan-lee-phillips/73-187976c6-92e2-42e2-9164-1d25f6cfd58c>

Brazil's National Campaign for the Collection of DNA from Relatives of Missing Persons

Federal Police

Brazil

"In March 2011, a fisherman left his home in Aracati, Ceará (Northeast of Brazil), to fish in the state of Bahia and lost contact with his family. Ten years later, his daughter, who moved to Natal, Rio Grande do Norte, became aware of the National Campaign for the Collection of DNA from Relatives of Missing Persons, coordinated by the Ministry of Justice and Public Security (MJSP). In order to locate her father, the daughter decided to file a police report and, together with her mother, sought out the Technical-Scientific Expertise Institute of Rio Grande do Norte (ITEP/RN) to provide biological materials. In cooperation with the Forensic Expert of the State of Ceará (PEFOCE/CE), the samples from the daughter and wife were processed and uploaded to the National DNA Database.

In December 2015, a body was found floating on the shores of Itaguaçu beach, in São Francisco do Sul, Santa Catarina (South of Brazil; more than 3,000 km away from the place of disappearance). The body was identified as male, in an advanced state of decomposition. Following standard protocol, samples of the body were collected and sent to the Forensic Genetics Sector of the Forensic Analysis Directorate of the Santa Catarina Scientific Police (PCI/SC), in Florianópolis. The genetic profile obtained from the unidentified remains were compared with the genetic profile of the mother of a fisherman who disappeared from the Navegantes region, in July 2015. However, DNA tests resulted in the exclusion of kinship between the individuals. In this way, the genetic profile of the unidentified body was imported into the State DNA Database of Santa Catarina and uploaded to the National DNA Database in 2016.

After ITEP/RN collected in 2021 the biological samples of the fisherman's wife and daughter, PEFOCE/CE uploaded their genetic profiles to the National DNA Database. A Pedigree Rank with the genetic profile of the unidentified body found in Santa Catarina was quickly registered. The experts then worked together to confirm, through historical context and physical and anthropological characteristics, if the body found was really that of the missing fisherman. In May 2022, the ITEP/RN team informed the family about the identification of the missing person.

This report demonstrates the importance of the National Campaign for the Collection of DNA from Relatives of Missing Persons, the Integrated Network of DNA Databases (RIBPG) and the National DNA Database and in Brazil, an essential tool for comparing genetic profiles between states and without which this case would not be solved."

Supporting Links

<https://g1.globo.com/sc/santa-catarina/noticia/2022/05/31/corpo-de-pescador-e-identificado-em-sc-10-anos-depois-de-desaparecimento-no-ceara.ghtml>

<https://www.sspds.ce.gov.br/2022/05/30/dna-da-pefoce-auxilia-na-identificacao-do-corpo-de-pescador-desaparecido-ha-10-anos/>

<https://www.policiacientifica.sc.gov.br/noticias/desaparecido-ha-10-anos-corpo-de-pescador-encontrado-em-sc-e-identificado-pelos-bancos-de-perfis-geneticos/>

<https://www.youtube.com/watch?v=YGXrydz8TyU> (minute 48:29)

First Rape Case solved by Brazil's new Multi-User Automated Processing Center for Sexual Traces System

Brazilian Federal Police

"The case of Roraima's rapist

1) In May 2019, a rape and a robbery took place in the state of Roraima, northern region of Brazil. Two suspects approached a woman who had left the house to take out the garbage. One of them had a gun and the other one carried a knife. They forced her to go inside where her son was. The miscreants tied the boy downstairs, and the older guy took the woman upstairs, forced her to give him money, some jewelry, as well as two cell phones. Also, the older guy pulled her by the hair, demanding the car keys, threatening to kill her son if she does not give the keys. Then, the older guy took her to the bedroom and forced her to take off her clothes and have sex with him. After that the suspects fled and the woman called the police.

2) In September 2021, based on a cooperation agreement signed by the National Secretary for Public Security and the Brazilian Federal Police, the Multi-User Automated Processing Center for Sexual Traces (CeMPA-VS) was created aiming to process the backlog samples related to sexual crimes in Brazil. This Center is responsible for receiving, processing, and analyzing results coming from all over Brazil. In this context, samples originated from crimes involving sexual violence that have occurred in the state of Roraima were sent to the Laboratory of Forensic Genetics at the Nacional Institute of Criminalistics of Brazilian Federal Police in Brasília/DF, to be processed and analyzed by DNA experts and, when applicable, the profiles generated would be entered into DNA Index System (CODIS).

3) The genetic profiles related to the case described were entered into CODIS and a match was found on December 19th of 2021, between one of them and a profile coming from evidence related to another rape case that had taken place before in the state of Maranhão, northeast region of Brazil, and whose attacker had already been identified by the initials J.M.G.R.

4) This case was considered emblematic for being the first match supported by CeMPA-VS that directly helped to identify and arrest a rapist in the northern region of Brazil."

<https://g1.globo.com/rr/roraima/noticia/2022/02/20/como-a-policia-de-roraima-identificou-estuprador-no-maranhao-usando-banco-nacional-de-dna-entenda.ghtml>

Serial Killer Identified by CODIS, Genetic Genealogy Perhaps the first Interstate Familial Search

Denver Police Department Crime Laboratory

The solving of four cold case sexually motivated homicides from more than forty years ago in the Denver, CO metropolitan area happened through a combination of local CODIS matches, Investigative Genetic Genealogy (IGG), and an interstate familial search with the state of Texas. Local CODIS searches linked the cases together, IGG traced the individual's family line to Texas, and the familial search identified the exact family. After elimination of multiple brothers by investigators, an exhumation of a deceased individual and subsequent DNA testing on the remains identified the perpetrator as Joe Ervin and provided some measure of resolution to the families. Three of the cases occurred within the City and County of Denver and the fourth case occurred in neighboring Adams County. The individual responsible for these crimes subsequently killed a female Aurora, Colorado police officer during a traffic stop and then committed suicide while in jail awaiting court proceedings for that murder. The identification of Joe Ervin is nominated for "DNA Hit of the Year" due to the 'every tool in the toolbox' approach, the identification of a serial killer, and the innovative nature of the work performed. To date, another interstate familial search match is not known and one of this magnitude strengthens the reasoning to make this a regular option in cold casework. These cases were funded in part by federal grants and local Crime Stoppers backing.

<https://www.youtube.com/watch?v=zs4ByiCguao> <https://www.oxygen.com/crime-news/colorado-cop-killer-joe-michael-ervin-idd-as-serial-killer>

<https://www.washingtonpost.com/nation/2022/01/29/colorado-police-killings-denver-cold-case/>

**Operation Greenfinch/Operation Sandpiper
Familial Search of UK DNA Database Solves 33-year-old UK Cold Case**

Head of Operations, Cellmark Co, UK

Joint Submission between Cellmark and Kent Police

Please see below case summary in relation to Operation Greenfinch/Sandpiper as a submission for the DNA Hit of the Year 2023. This is a cold case, involving the murders of two young women in 1987, where the suspect was identified via a familial search of the UK DNA Database. Following the identification and arrest of David Fuller, Kent Police uncovered extensive material identifying him as having undertaken numerous sexual offences against the bodies of deceased females whilst in hospital mortuaries. This submission is made jointly by Cellmark Forensic Services and Kent Police.

Operation Greenfinch was an investigation into the murders of two young women in 1987. The first, Wendy Knell, on 22nd June returned to her bedsit in Tunbridge Wells following an evening with her boyfriend. The following morning her body was found naked on her bed. The second, Caroline Pierce, after an evening out on 24th November was dropped by taxi at her flat in Tunbridge Wells. Neighbours heard screams and Caroline was reported missing. Her body was found three weeks later, clothed only in a pair of grey tights, partially submerged in a ditch approximately thirty miles away.

Post mortem examinations identified that both women had died as a result of blunt force trauma to the head, asphyxiation and had been subject to sexual assault.

Kent Police formally linked these two murders early in the investigation which spanned 34 years until its conclusion in 2021. Initially both cases were examined separately by the Forensic Science Service (FSS). Semen was identified on a towel from beneath the head of Wendy Knell on the bed and on a duvet. An SGM DNA profile was obtained from the semen staining on the duvet. This DNA profile was upgraded in 2001 to SGM+ and loaded to the United Kingdom National DNA Database (NDNAD). No matches with any reference DNA profiles were obtained. At this stage no forensic link to the Caroline Pierce case had been established. Both cases were subject to further scientific examinations at the FSS, including several familial searches of the NDNAD using the DNA profile obtained from the semen on the duvet. Following the closure of the FSS in 2011, further forensic examinations were conducted by Cellmark Forensic Services (CFS). In 2018 the DNA profile from the semen on the duvet was upgraded to a DNA-17 profile. Further work was undertaken on what remained of the tights relating to Caroline Pierce. This resulted in the detection of a trace amount of spermatozoa from which a low level mixed DNA profile was obtained. It was established that the source of semen in the Wendy Knell case could be a possible contributor to this low level mixed DNA profile, hence establishing a potential forensic link between the two cases.

In 2020 a familial search of the NDNAD generated an extensive list of names. As a priority Kent Police began sampling a group of individuals from the parent-child and sibling list, upgrading profiles to DNA-17 and Y-STR as appropriate. A close male relative of the offender was included on this list, providing Kent Police with a link to David FULLER who the police arrested in December 2020, 33 years after the two murders.

Following his arrest Kent Police uncovered extensive material identifying David FULLER as having undertaken numerous sexual offences against the bodies of deceased females whilst in hospital mortuaries, Operation Sandpiper.

In November 2021 during the trial David FULLER pleaded guilty and was given two whole life sentences for the murders with a further 12 years for the other offences.

Below are two of the media link – further can be found by searching the case details.

[David Fuller: Killer who abused mortuary bodies will die in jail - BBC News](#)

[David Fuller sentenced to whole life imprisonment | Kent Police](#)

If you require any further information please do not hesitate to contact myself or my colleagues copied into this email.

Body found on Christmas Eve leads to DNA Match with Homeless Man

Plantation Police Department, Florida

Location of Crime: Plantation, FL

Date of Crime: 12/24/20

Date of Hit: 2/10/21

Significance: Prior to receiving the notification of the CODIS hit, all of the DNA was unidentified. The DNA of six other suspects were compared with no hits or leads. The suspect had not been a suspect prior to the DNA hit and due to the swiftness of the DNA analysis, an arrest was made within three months.

Executive Summary: A deceased female was found in the dumpster area of the West Regional Library on Christmas Eve 2020. A beach towel was wrapped around her neck and her clothing was found pulled up her back, exposing her lower back. Several possible suspects were interviewed and their DNA was collected for comparison but no matches were made. All fingerprint identifications belonged to the victim.

Submitted Facts: Lissette Perez was found murdered on Christmas Eve in the dumpster area of the West Regional Library. She was found face down, strangled with a beach towel. Her body was resting on several cardboard boxes and a duffel bag with the victim's personal items were found near the body. The scene was processed for fingerprints and areas were swabbed for possible DNA. All fingerprint identifications belonged to the victim. DNA swabs were collected from the door latches of the dumpster area, the lower back of the victim, and both of her hands and her neck. The cardboard box was processed for fingerprint using ninhydrin. An area consistent with 'finger marks' developed but no ridge detail was able to be seen. This area was located in very close proximity to the body. It was believed that the suspect had touched this area. The beach towel had been compressed on both sides of the victim's neck. It was believed this is where the suspect had been gripping the towel during the incident. The area was marked before removal so that the DNA collected could be concentrated to this area. The MVac was used to collect DNA from the beach towel, cardboard box and duffel bag. Several suspects were interviewed and their DNA was collected and sent down to the Broward Sheriff's Office for comparison. None matched. The unknown DNA profiles from the scene were submitted to CODIS.

On 2/10/21 we were notified of a 'hit' from the swabs collected from the victim's exposed lower back. This person's name had not come up in the investigation until the DNA hit result. The suspect, who was homeless, was tracked down by Detectives and his DNA was collected and sent to the lab for comparison. His DNA from the collected standards was matched to more items collected from the scene, including the beach towel that was wrapped around her neck and the cardboard box. Without the first CODIS hit, the suspect would have remained unidentified. The suspect was arrested on 3/25/21 and charged with murder. He is currently awaiting trial.

*A CODIS Hit Notification letter and a Crime Laboratory Analysis Report were also submitted. They can be found [here](#).

Murder Commits Suicide 24 years before DNA Database Catches Him

Orange County District Attorney's Office California

Date of Crimes: May 21, 1987 and February 19, 1989

On May 21, 1987, at approximately 11:35 PM, a 70-year-old man entered his home in Garden Grove, California and found the deceased body of his tenant, 23-year-old Shannon Rose Lloyd. An autopsy determined Lloyd was sexually assaulted and died from strangulation. No witnesses to the sexual assault and murder were ever located. The Garden Grove Police Department secured evidence from the crime scene inside the home and a sexual assault kit was collected at autopsy.

On February 19, 1989, in the early morning hours, 27-year-old Rene Cuevas was found naked and deceased near the El Toro Marine base, about 15 miles from Garden Grove. An autopsy determined that she too had been strangled and sexually assaulted. Evidence was collected from the scene by the Orange County Sheriff's Department.

In 1997, with the advancements in forensic DNA testing, evidence from both cases was separately submitted and tested by the Orange County Crime Lab (OCCL). As DNA testing improved, the OCCL continued to test the evidence with the most current DNA technology. Thus, in 2003, with multiplex STR testing, the OCCL obtained a local match between the suspect DNA profile obtained from the Lloyd sexual assault and homicide and the suspect DNA profile obtained from the Cuevas sexual assault and homicide.

The suspect male DNA profile from the DNA evidence of both the Lloyd and Cuevas sexual assault and homicide cases was uploaded into CODIS, however, there were no hits. A Y-STR profile was also developed and a CalDOJ familial DNA search was also conducted, but there were no successful leads.

The Garden Grove Police Department and the Orange County Sheriff's Department both conducted an exhaustive investigation into the murders and sexual assaults, without success. In 2021, after exhausting all reasonable leads, the Garden Grove Police Department requested the assistance of the Investigative Genetic Genealogy (IGG) team of the Orange County District Attorney's Office (OCDA) to evaluate this case for a possible IGG investigation.

No DNA extract remained from the Cuevas homicide evidence. After many rounds of DNA testing over the years, the DNA extract remaining from the Lloyd homicide was also limited in quantity and was a mixture, making it a more challenging sample for SNP testing. A private SNP lab was contracted to process the DNA extract to develop a SNP profile that could be uploaded into law-enforcement friendly genetic genealogy databases.

In March 2022, the OCDA IGG team received the successful results of the SNP testing and genealogy database uploads. The OCDA IGG team then commenced an IGG investigation that included identifying distant family matches from the genealogy databases and using these matches to build family trees. Within eight days of receiving the match results, the OCDA IGG team identified a potential suspect, Reuben J. Smith, born December 11, 1959 in Michigan. Smith was in the Navy from 1977 to 1981.

Smith had ties to Orange County in the 1980s and in the 1990s moved to Las Vegas. On July 30, 1998, in Las Vegas, Nevada, Smith was arrested for the sexual assault and attempted murder of a female adult who accepted a ride home from him. Charges were later dismissed; thus, although a sexual assault kit was collected, it was never processed for upload into CODIS.

On November 20, 1999, in Las Vegas, Nevada at an I-15 North Fwy turnoff, Smith committed suicide by firearm, the year after his Las Vegas arrest and just 21 days before his 40th birthday. Evidence from the 1998 arrest in Las Vegas that was retained included a suspect blood standard from Smith, which was sent to the OCCL for testing and comparison to the crime scene evidence profiles from both homicide cases. In April 2022, the DNA test results confirmed Reuben J. Smith was the perpetrator of the Lloyd and Cuevas homicides.

Press Conference

<https://www.facebook.com/OCDAToddSpitzer/videos/427124789168668/>

Press Release

https://orangecountyda.org/press/two-orange-county-cold-case-murders-solved-through-multi-agency-effort-using-investigative-genetic-genealogy/?fbclid=IwAR1tp8kPFJsWI-3T43ouih_Y2B0RLimJeH4pyHL-MmDjHB5yjJDBm4BU0Ec

Press Links

<https://www.cbsnews.com/news/dna-links-same-man-reuben-smith-two-cold-case-murders-shannon-lloyd-renee-cuevas-1980s/>

<https://abcnews.go.com/US/cold-case-murders-1980s-solved-genetic-genealogy-police/story?id=87416810>

<https://www.cnn.com/2022/07/26/us/california-cold-case-murders-solved/index.html>

<https://www.foxnews.com/us/two-california-cold-case-homicides-1980s-solved-advances-dna-technology>

<https://www.nbclosangeles.com/news/local/cold-cases-oc-dna-renee-cuevas-shannon-lloyd-smith/2948535/>

<https://www.oxygen.com/crime-news/reuben-smith-suspect-renee-cuevas-shannon-lloyd-murders> <https://abc7.com/cold-case-murders-orange-county-dna/12072810/>

<https://adnamerica.com/en/california/two-cold-case-murders-solved-california-using-genetic-genealogy-technology>

<https://www.wdsu.com/article/suspect-1980s-killings-2-california-women-identified-dna/40721712>

<https://www.latimes.com/california/story/2022-07-25/a-killer-took-the-lives-of-two-orange-county-women-in-the-1980s-justice-3-decades-later>

<https://ggcity.org/news/cold-case-murders-solved>

<https://ktla.com/news/local-news/man-who-committed-suicide-in-1999-linked-to-2-o-c-cold-case-killings-officials/>

<https://abcnews.go.com/US/cold-case-murders-1980s-solved-genetic-genealogy-police/story?id=87416810>

https://www.wlfi.com/news/national/a-suspect-in-the-1980s-killings-of-2-california-women-is-identified-after-dna-match/article_3e8045ed-6cca-509a-a2b5-7fef10be4826.html

Using Consanguineous Marriages to Identify Terrorists Using Bahrain's DNA Database

Ministry of Interior
Kingdom of Bahrain

Abstract

The Kingdom of Bahrain is one of the few countries that has significant numbers of terrorist investigations, which has allowed our scientists to develop expertise in the forensic examination of post and pre-blast explosive exhibits as well as in developing different strategies in handling the terrorism evidences.

A total number of 34 Improvised explosive devices (IEDs) was deployed in different areas of Bahrain, mainly in Aali, Hamad Town and Bori in years 2015-2017. These IEDs consisted of pipes, adhesive tapes, cardboard boxes, and some electrical devices.

Terrorists do not respect geographical boundaries nor ethnicities of the victims, and the uses of DNA profiling technology are the most suitable way to identify the terrorists and keep an end to their violence. The results of touch DNA of these samples were stored in National DNA database and there was no hit at that time. The strategy in working on Terrorism cases have been published in the following papers and book chapters:






- Al-Snan, Noora R. "The recovery of touch DNA from RDX-C4 evidences." *International journal of legal medicine* 135.2 (2021): 393-397.
- Al Snan NR, Ghayyath MA. Potential Use of Touch DNA in Terrorism Cases: A Report of Four Cases. *Arab Journal of Forensic Sciences & Forensic Medicine (AJFSFM)*. 2019;1(9):1267.
- Al-Snan, Noora R. "Potential Use of DNA Profiling in Solving Terrorism Cases." *Handbook of DNA Profiling (2022)*: 589.


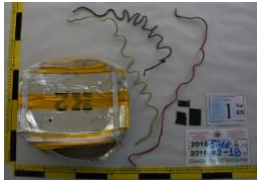



In 2019, we have come up with new DNA methodology which is going to be published soon under the title of *The effect of consanguineous marriages in solving DNA cases which was published in the following paper:*

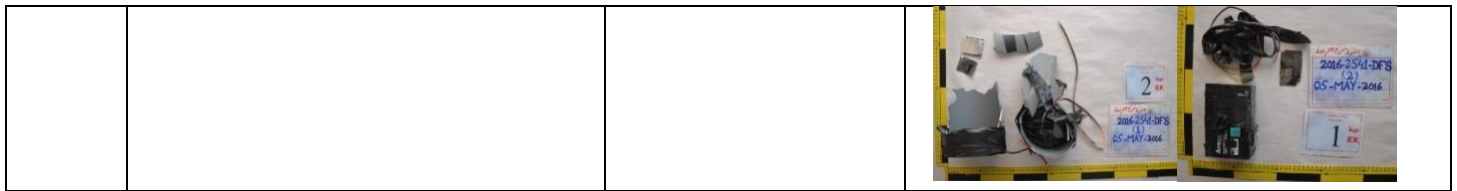
- Al-Snan, Noora R., Fatima J. AlBuarki, and Samreen S. Sayed. "The Effect of Consanguineous Marriages in Solving DNA Cases." *Handbook of DNA Profiling (2020)*: 1-13.






Up to date, there are few papers discussing the inbreeding marriages and how they positively affect the process of human identification. We have found out the crucial need in focusing upon the characteristics of STR electropherograms with the excess of homozygous loci found and how can we utilize this kind of DNA profiles in obtaining astonishing findings. This strategy helped us to identify many unknown suspects by using familial DNA searching and kinship analysis by utilizing the number of homozygous loci found within each of the DNA STR profiles. These homozygous counts assisted in identifying most of the known relatives stored in the DNA database, thus leading to the wanted unknown suspects.


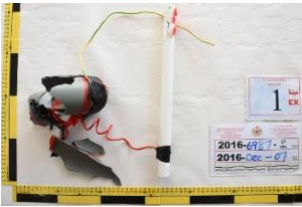
Mentioned below, the details of each terrorism cases mentioned.

S.No	Case References	Incidence	Samples
1	DFS /6957/FSL/ 2/ 4376/ 2016	Five IEDs were found in Aali area on 05/12/2016	S1: Blue tape 
2	DFS /6983/FSL/ 2/ 4426/ 2016	One IED was found in Aali area on 06/12/2016	S1-2: Red Tape 
3	DFS/6982 /FSL/ 2/ 4425/ 2016	One IED was found on Sheikh Zayed Road, Block 740, in Aali on 06/12/2016	S1: Black and yellow tapes 
4	DFS/6942 /FSL/ 2/ 4367/ 2016	One IED was found on Salmabad Road, Block 708 on 04/12/2016	S1: Red tape 
5	DFS/6512 /FSL/ 2/ 4060/ 2016	One IED was found on Sh. Khalifa bin Salman Road, Manama side toward Aali area on 10/11/2016	S2: Yellow tape 
6	DFS/5508 /FSL/ 2/ 3394/ 2016	Two IEDs were found on Sh. Khalifa bin Salman Road, Hamad town side Block 760 on 25/09/2016	S1: Black tape 

S.No	Case References	Incidence	Samples
7	DFS/5508 /FSL/ 2/ 3394/ 2016	One IED was found near to resident house in block 738, Aali on 18/09/2016	S1: Green tape 
8	DFS/5266 /FSL/ 2/ 3256/ 2016	One IED was found on Sh. Salman Road near to Car Exhibition center on 15/09/2016	S1: White Tape 
9	DFS/3552 /FSL/ 2/ 2109/ 2016	Two IEDs were found on AlFakhar Roundabout on Sh. Zayed Road, Block 730 Aali on 21/06/2016	S2: Yellow and Black tapes 
10	DFS/3482 /FSL/ 2/ 2048/ 2016	Three IEDs were found on Sh. Zayed Road near to AlFakhar Roundabout on 16/06/2016	S2: Red tape on pipe 
11	DFS/3281 /FSL/ 2/ 1925/ 2016	Four IEDs on Sh. Zayed Road, block 742 Aali on 07/06/2016	S7: Yellow tape, S1: Green and black tape 
12	DFS/2541 /FSL/ 2/ 1466/ 2016	Two IEDs were found on Sh. Zayed Road, block 740 Aali on 04/05/2016	S1: black phone and black tapes, S2: Wires



S.No	Case References	Incidence	Samples
13	DFS/919 /FSL/ 2/ 435/ 2016	Three IEDs were found on a yard opposite of abandoned warehouse, block 738 Aali on 14/02/2016	S2-2: Black Bag with black tape 
14	DFS/7078 /FSL/ 2/ 3038/ 2015	Two IEDs were found on road, block 742 Aali on 25/11/2015	S1: Red tape on gallon 
15	DFS/993 /FSL/ 2/ 515/ 2015	Riots and outlaw's terrorism acts were performed in block 738 Aali on 14/02/2015	S2: Face Mask 
16	DFS/3417 /FSL/ 2/ 2361/ 2017	One IED was found in Sh. Khalifa bin Salman Road, Hamad Town on 11/07/2017	S1: Metallic Can with Black tape 
17	DFS/4709 /FSL/ 2/ 2839/ 2016	Two IEDs were found on Road no. 71, Bori on 14/08/2016	S1: Blue tape on pipe and MP3 device 
18	DFS/4706 /FSL/ 2/ 2836/ 2016	One IED was found on Road, block 738 Aali on 14/08/2016	S1: pipe with tapes

			
<p>19</p>	<p>DFS/6987 /FSL/ 2/ 4410/ 2016</p>	<p>One IED was found on Sh. Zayed Road near to Driving Training center, Block 734 Aali on 06/12/2016</p>	<p>S1: Broke pipe with tapes</p> 

References obtained:

In July 2020, we have applied the homozygous count in the unknown DNA profile for the samples mentioned above. There were four homozygous loci and a microvariant (.2) (ratio of 50%) having homozygous which is relatively high and processed via AmpFLSTR™ Identifiler™ Plus PCR Amplification Kit).

Those five loci were checked in the National DNA database containing approximately ~ 100,000 DNA profiles (known and samples DNA profiles). The partial loci gave partial hit with 77 suspects. Along with our FSI team (Forensic Science Intelligence) and in cooperation with the Department of Criminal Investigation (CID) we have studied these 77 suspects that came hit with the 5 loci match and one of them was a 25 years old man (S.M) who was living near to this area where the IEDs were deployed (Aali).

On 26 July 2020, we have requested for the siblings of this person (S.M), who arrived at the CID to sign a collection consent and gave two reference samples. After analyzing his reference sample through GlobalFiler PCR amplification Kit and his fingerprint, it came a match to all of samples and fingerprint collected in the 19 cases of IEDs along with an outlaw case.

Significance of the HIT:

This is an important match achieved by using our strategy of counting the homozygous. It has been applied for many samples and so far, most of the cases gave a positive match. Consanguineous marriages are found among one-fifth of the world population mostly residing in the Middle East, West Asia, and North Africa, in addition to the emigrants from these communities now residing in North America, Europe and Australia. Although consanguinity is unadvised in medical practices as well as in some religious conviction such as Islam, due to the reoccurrence of recessive genetic disorders such as neuromuscular disorders, metabolic disorders, osteopetrosis syndromes and chondrodystrophia that might be lethal to the offspring. Nonetheless, there are still some cousin marriages at present day in most of the Arab countries, such as in tribes, conservative families, and Bedouins. There is considerably high level of inbreeding in the Arab countries, with intra-familial unions accounting for 20–50+% of all marriages compared to other countries.

This technique can be applied in various criminal cases such as terrorism, organized killings, robbery and human trafficking. As long as there is homozygous and microvariants characteristics in the electropherogram, DNA analyst can apply the partial search in the DNA database to look for possible matches from the relatives (any direct relative) of the wanted suspect.

This significant hit was obtained through the continuous progress in the forensics which is based upon worldwide research and the constant pursuit of the use of science in the achievement of crimin

Roxanne Wood Homicide
Incredible story of how sample containing only 5 human cells
eventually led to the suspect through FGG

Michigan State Police Niles Post & Colleen Fitzpatrick, PhD

The 1987 sexual assault and homicide of Roxanne Wood established the fact that records are made to be broken in applying Forensic Genetic Genealogy to cold casework. After nearly 35 years, the FGG identification and arrest of Patrick Gilham for the murder was based on a record low 30 pg of DNA, the contents of only about 5 cells of the human body. Although Gillam had an extensive criminal record, including prison time for an identical sexual assault case in 1979, his profile had not been entered into CODIS because his offenses had been committed in the 1970s and 1980s. Solving the case using FGG required high-risk decision-making to consume the only remaining, highly compromised DNA crime scene sample. Each step in that high-risk process failed, but each challenge was met with persistence to develop work-arounds that brought new insight into how to address degraded and low-level DNA. The FGG identification of Patrick Gillam as a suspect in Roxanne's murder based on those 30 pg of DNA led to a CODIS hit with a probability of 1 in 1.9 octillion.

Please go to the full submission [here](#).

Inner Mongolia Rape and Murder Case Solved 32 Years Later

Inner Mongolia

China Public Security Department

A murder case was solved by DNA 32 years later

On July. 26th 1989, a fifteen-years-old girl, named Hongxia Sun, who was from Yinchuan, Ningxia, P.R.China, was raped and killed with stab in Alashan region, Inner Mongolia, P.R.China. The survival material evidences were examined by Yongzai Wang, a technical personal from the DNA lab. of the Inner Mongolia public security department in 2020. The STR types and the Y-STR haplotype of the seminal stain were obtained at last.

The Y-STR haplotype matched Zhang family in Jining, Shandong province, and a man named Jinran Zhang, a member from the Zhang family, who moved to Alashan region in 1988, was determined the suspect after long-time detection. His STR types of blood matched the seminal stain STR types without difference after he was detained. jinran Zhang confessed his rape and murder actions at last.