

Three Suspects Charged with Multiple Offences Following a Burglary Investigation

A ParaDNA® Case Study from Osceola County Sheriff's Office

Heather White¹, Paul Rendell²



¹Osceola County Sheriff's Office, Kissimmee, FL 34744, USA

²LGC, Queens Road, Teddington, TW11 0LY, UK

Setting the Scene

A gas station burglary was under investigation by Osceola County Sheriff's Office when reports of a second burglary were received by a City Police Department. The MO for both crimes was similar. Detectives en route to the city burglary spotted a vehicle matching an eyewitness description and subsequently detained the 3 male occupants. DNA evidence was gathered from the interior of the vehicle, the gas station and also from the premises of an ice cream parlour where a 3rd burglary had recently occurred. Under court order, all 3 suspects provided buccal swabs.

Evaluating the Evidence



Stain on seat of suspect's vehicle



Stain on floor of gas station

Reddish-brown stains were identified on the seat of the suspect's car and on the floor of the gas station. Each stain was sampled with a wet, sterile cotton swab and then subsampled using the ParaDNA Sample Collector.



ParaDNA Comparison Results for: B Suspect A buccal

Date	Case Number	Item Number	Allele Count	Match Probability	Source
16/05/2017 16:46:26	B	Stain on car seat	11 / 12	1 : 1,800,000	ParaDNA:1343
10/05/2017 10:18:44	B	Stain on floor	10 / 12	1 : 290,000	ParaDNA:1343
16/05/2017 10:07:25	A	Stain near cash register	No match		ParaDNA:1343

	D16	D18			THO	D8		Amelogenin		D3		
Suspect A buccal	10	11	15	18	8	9	13	15	X	Y	16	17
Stain on car seat	10	11	15	18	8	9	13	15	X	Y	17	-

Both the stain on the car seat and the stain from the gas station floor were strong matches with the buccal from Suspect A.

ParaDNA Comparison Results for: B Suspect B buccal

Date	Case Number	Item Number	Allele Count	Match Probability	Source
16/05/2017 16:46:26	B	Stain on car seat	No match		ParaDNA:1343
10/05/2017 10:18:44	B	Stain on floor	No match		ParaDNA:1343
16/05/2017 10:07:25	A	Stain near cash register	No match		ParaDNA:1343

	D16	D18			THO	D8		Amelogenin		D3		
Suspect B buccal	11	13	14	18	7	9	10	14	X	Y	14	17
Stain on car seat	10	11	15	18	8	9	13	15	X	Y	17	-

Suspect B did not match any of the stains that were analysed with the ParaDNA system.

Impact of Using ParaDNA

- Direct link established between suspects and crime scenes within the County Sheriff's jurisdiction
- DNA samples selected for State lab processing with confidence and a clear expectation of the outcome
- Investigation time significantly reduced, allowing all 3 cases to be closed quickly
- Interagency cooperation encouraged between the County Sheriff's Office and the City PD

ParaDNA Comparison Results for: B Suspect C buccal

Date	Case Number	Item Number	Allele Count	Match Probability	Source
16/05/2017 10:07:25	A	Stain near cash register	12 / 12	1 : 6,400,000	ParaDNA:1343
16/05/2017 16:46:26	B	Stain on car seat	No match		ParaDNA:1343
10/05/2017 10:18:44	B	Stain on floor	No match		ParaDNA:1343

	D16	D18			THO	D8		Amelogenin		D3		
Suspect C buccal	11	13	17	21+	6	8	13	14	X	Y	14	16
Stain near cash register	11	13	17	21+	6	8	13	14	X	Y	14	16

Suspect C was found to be a strong match with a reddish-brown stain near the cash register of the ice cream parlour.

Case Outcome

All 3 suspects were charged with Burglary of a Structure (FSS 810.02(4A)), Criminal Mischief of more than \$1000 (FSS 806.13 (1B3)) and Possession of Burglary Tools (FSS 810.06).

Cellular phone information and witness testimony strengthened the case further, encouraging Suspect B to confess. Additional charges were filed by the City Police Department in relation to the 2nd burglary, which occurred within their jurisdiction.