applied biosystems

Empowering forensic DNA laboratories to solve crime and identify missing persons innovation, partnership, and advocacy for the power of DNA evidence

A body is discovered in the Green River in south King County, Washington. Four more bodies are discovered that year. Police task force is set up, led by Officer Dave Reichert.

The Green River killer case begins

1982

Based on a prior arrest in 1982 for prostitution-related charges, a suspect in the Green River killings is under investigation.

A suspect is identified

1984

1983

The suspect contacts the Green **River Task Force**

The suspect denies contact with the victims and passes a polygraph examination. During this year, the suspected victim count rises to 42.

1983

Killings continue

Seven more bodies are discovered in King County, Washington.

Using new DNA identification methodology, the first-ever conviction based on DNA evidence is obtained in a case of two murdered teenagers.

DNA profiling technique developed in UK

1987

Police search the suspect's home and vehicles, and take hair and saliva samples. There is insufficient evidence to arrest him.

Examination of the suspect continues

Dave Reichert elected sheriff of King County

1997

1987

First US

conviction based on DNA analysis

A suspect in the US is convicted of rape in Orange County, Florida, based on a DNA match between his blood sample and semen traces found in a rape victim.

1995

Capillary electrophoresis is invented

The revolutionary Applied Biosystems™ 310 Genetic Analyzer is developed; it is capable of processing up to 32 samples per day.

1998

The Combined DNA Index

System (CODIS) is

crimes for which there are no

identified suspects.

established by the FBI

This database is used to help solve

2009

On the urging of Sheriff Dave Reichert, the Washington state

crime lab uses a newer DNA testing method to test evidence

from the Green River killer case.

2001

Green River killer evidence

undergoes further testing

Technological innovation

The suspect pleads guilty to 48 counts of

convicted and receives 48 life sentences.

aggravated first-degree murder. He is

Guilty conviction

2003

The Applied Biosystems™ 3500xl Genetic Analyzer provides forensic laboratories with the power to process up to 987 samples per machine, per day.

The suspect is arrested after his DNA is linked to three victims

2001

The body of a 20-year-old victim is discovered. The Green River killer is charged with the murder and pleads guilty.

An additional victim is discovered

2010

2012

Breakthrough chemistry

Applied Biosystems[™] GlobalFiler[™]

database compatibility. Only

GlobalFiler kits include all loci

STR kits are designed for maximum

recommended by the CODIS Core

markers commonly used in Europe.

Loci Working Group, including all

Applied Biosystems™ Quantifiler™ Trio DNA quantification chemistry is designed to offer superior power in detecting male-to-female ratios—by providing laboratories with crucial information about mixtures, this chemistry can empower laboratories to make informed decisions in the processing of rape kits.

Breakthrough chemistry

2014

2017

Passage of the Rapid DNA Act of 2017

> Criminal offender profiles generated at the booking station on qualified rapid DNA systems may be eligible for CODIS upload. The Applied Biosystems™ RapidHIT™ ID System may enable law enforcement to obtain critical intelligence in hours, rather than weeks or months, to help solve crime faster and make communities safer.

> > **ThermoFisher**