

# NEW WAYS TO SOLVE CRIMES

## FORENSIC DNA IMPROVING THE CRIMINAL JUSTICE SYSTEM

### FORENSIC DNA TESTING

DNA barcoding is designed to identify a species, rather than an individual. DNA Profiling is a forensic technique that is used in criminal investigations, to assess suspects' involvement by comparing criminals' profiles to DNA evidence. Everyone has a unique genetic code, which is why forensic DNA is considered to be one of the most accurate methods available that are used in the criminal justice system.



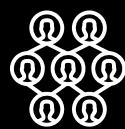
COLLECT EVIDENCE



SEND TO GENEALOGY WEBSITE



ANALYZE IN A LAB



COMPARE TO RELATIVES



SAVED IN DATABASE

### FORENSIC DNA BACKGROUND

DNA Profiling is a forensic technique that is used in criminal investigations to assess suspects' involvement by comparing criminals' profiles to DNA evidence. Everyone has a unique genetic code, which is why forensic DNA is considered to be one of the most accurate methods available that are used today.

### FORENSIC DNA DATABASES

Databases must be active and accessible for the function of forensic DNA. Many raise the question of ethics and legality of genetic genealogy websites. A great amount of users face the risk of giving away their privacy unknowingly by subjecting their DNA to law enforcement who use genetic genealogy websites to find suspects.

### DNA PROFILING

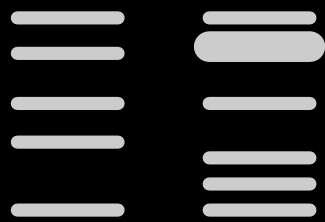
Law enforcement look at victims' DNA and on any physical evidence available. After the analysis in a lab, the DNA barcode is compared with existing suspects who are already in the database. When a match is found an arrest is issued, otherwise the new DNA barcode is saved into the database until new evidence will present themselves.



VICTIM



EVIDENCE



Looking at victim's DNA and evidence's DNA



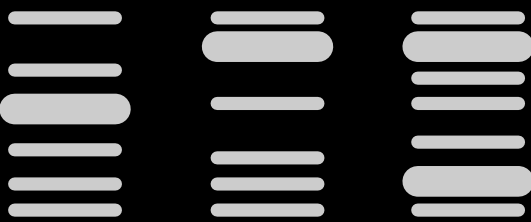
SUSPECT A



SUSPECT B



SUSPECT C



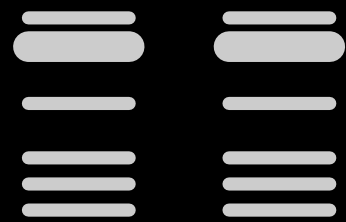
Comparing barcodes to suspects in the database



EVIDENCE



SUSPECT B



Finding a match