

# Brainwave Science

## Executive Summary





## Brain Fingerprinting Technology: Executive Summary

### What is Brain Fingerprinting Technology?

Brain Fingerprinting technology is a new scientific technology to detect whether specific information is stored in a person's brain. This technology can provide evidence to identify criminals and terrorists accurately and scientifically. Brain Fingerprinting testing measures brainwave responses to crime-relevant or terrorism-relevant words or pictures presented on a computer screen. To date, Brain Fingerprinting testing has not resulted in any incorrect determinations – there have been no false positives or false negatives. It has provided highly accurate results in over 200 tests, including tests on FBI agents and tests sponsored by the CIA and the US Navy. Brain Fingerprinting testing has been ruled admissible in court in a murder case.

### Proven Accuracy in US Government Tests; Scientific Publications

Brain Fingerprinting testing detected which people in a group were FBI agents, by measuring brain responses to words and phrases that only FBI agents would recognize. This research was conducted by Dr. Lawrence Farwell, the inventor of Brain Fingerprinting technology, in collaboration with Dr. Farwell replicated this research using a larger group at the US Navy. In research funded by the CIA and other research, Dr. Farwell also used Brain Fingerprinting technology to test whether or not persons of interest had knowledge of crimes or espionage acts. Brain Fingerprinting has also proven highly accurate in detecting which individuals knew specific information that characterizes explosives (IED/EOD) experts. Dr. Farwell has published papers on Brain Fingerprinting testing in leading peer-reviewed scientific journals, including a publication co-authored with FBI scientist Sharon Smith in the Journal of Forensic Sciences. In these studies, Brain Fingerprinting testing provided the correct determination for every individual tested, with a high statistical confidence in every individual case.

### Dr. Lawrence A. Farwell

Dr. Lawrence Farwell is the inventor of Brain Fingerprinting technology. Dr. Farwell has degrees from Harvard University and the University of Illinois, and is a former research associate at Harvard. He has published dozens of articles in scientific journals as well as a book entitled How Consciousness Commands



Matter: The New Scientific Revolution and the Evidence that Anything Is Possible. TIME Magazine named Dr. Farwell to the TIME 100: The Next Wave, the 100 Innovators who may be “the Picassos and Einsteins of the next century.”

## **Ruled Admissible in Court; Man Convicted of Murder Freed after 25 Years**

Brain Fingerprinting testing was ruled admissible in court in the case of Terry Harrington, who was convicted of murder in 1978 in Iowa and sentenced to life in prison. Brain Fingerprinting testing proved that the record stored in Harrington’s brain did not match the crime scene, and did match his alibi. Confronted with the Brain Fingerprinting evidence, the only alleged witness to the crime recanted. In a sworn statement admitted as evidence, Harrington’s accuser confessed that he had lied in the original trial to avoid being prosecuted for the crime himself. In a post-conviction hearing, the judge ruled Brain Fingerprinting testing admissible, but stopped short of granting a new trial. Harrington appealed to the Iowa Supreme Court for a new trial based on Brain Fingerprinting testing and other evidence. The Supreme Court overturned Harrington’s conviction, and granted him a new trial based on constitutional rights violations in the original trial. The State elected not to re-try him, largely due to the recantation of the key witness that was elicited by his being confronted with the Brain Fingerprinting results. Harrington is now a free man.

## **Brain Fingerprinting Technology Helps Put a Serial Killer in Prison for Life**

Macon County, Missouri Sheriff Robert Dawson engaged Dr. Farwell to conduct a Brain Fingerprinting test on murder suspect JB Grinder. The test proved that the record stored in his brain matched the scene of the murder of Julie Helton. Faced with a certain conviction and a probable death sentence, Grinder pled guilty in exchange for life without parole. He also confessed to the murders of three other young women.

## **Counterterrorism Applications**

In any crime or terrorist act, the brain of the perpetrator is always there -- planning, executing, and recording the crime. There may or may not be other kinds of evidence. Brain Fingerprinting technology can identify the perpetrators and planners of terrorist acts by detecting the record stored in the brain. In addition, it could be used to identify trained terrorists. This capa



bility is demonstrated by Brain Fingerprinting's proven ability to detect specific training, as shown in tests at the FBI and the US Navy and tests to detect concealed bomb-making (IED/EOD) knowledge. Brain Fingerprinting technology can detect trained terrorists, bomb makers, members of a terrorist cell, etc., even before they strike.

### **Patented Technology; Contrast with Other Technologies**

Dr. Farwell has been issued four patents on the technology, and no viable competing technology exists. Both the Brain Fingerprinting test methodology and the P300-MERMER brain response are patented.

Brain Fingerprinting testing has nothing to do with lie detection. Rather, it detects information stored in the brain by measuring brain responses. Lie detector or polygraph machines measure emotional stress responses, and are not admissible in court. Conventional fingerprinting and DNA testing technologies are accurate and scientific, but only apply in about one percent of cases.

### **How Brain Fingerprinting Technology Works**

The fundamental difference between the perpetrator of a crime and an innocent person is that the perpetrator, having committed the crime, has the details of the crime stored in his brain, and the innocent suspect does not. Similarly, a trained terrorist has specific terrorism-related knowledge stored in his brain. This is what Brain Fingerprinting testing detects scientifically.

Words or pictures relevant to a crime, terrorist act, terrorist training, or specific knowledge or expertise are presented on a computer screen, in a series with other, irrelevant words or pictures. A suspect's brainwave responses to these stimuli are measured non-invasively using a patented headband equipped with EEG sensors. A proprietary computer program then analyzes the data to determine if the crime-relevant information is stored in the brain. A specific, measurable brain response known as a P300 is emitted by the brain of a perpetrator who has the details of a crime stored in his brain, but not by an innocent suspect lacking this record in his brain. The P300 response has been extensively researched and widely published in leading professional journals for more than 30 years and has gained broad acceptance in the scientific field of psychophysiology.





In his research on the P300 response, Dr. Farwell discovered that the P300 is one aspect of a larger brainwave response that he named a P300-MERMER (memory and encoding related multifaceted electroencephalographic response). The discovery of the P300-MERMER brain response allows the results gained through the P300 to be more accurate. Since the inclusion of the P300-MERMER in the brainwave data analysis algorithm, Brain Fingerprinting testing has made a definite determination in every case, including felony crimes. 100% of determinations have been correct.

Brain Fingerprinting has offered a \$100,000 for beating a Brain Fingerprinting test, and no one has succeeded in doing so.

More information is available at [www.governmentworks.com](http://www.governmentworks.com).