

Areas of the brain highlighted in different colours.

BRAIN NETWORK ACTIVATION (BNA™)

2015 Nominet Trust 100 Winner

2015 Nominet Trust 100 Winner

2015

MAPPING THE BRAIN

By El Mind A

Project URL: elminda.com

Project Twitter: [@whatsyourBNA](https://twitter.com/whatsyourBNA)

- Health
- Audiovisual

An estimated 2 billion people worldwide suffer from brain-related disorders – be they psychiatric disorders such as depression and ADHD, neurological disorders such as epilepsy and Alzheimer's, or pain-related disorders such as migraine. But diagnosis of these disorders is often inaccurate, due to the complexity of the human brain.

ElMindA's Brain Network Activation (BNA™) technology is making breakthroughs in the field of neurological mapping, helping the medical world to understand and correctly diagnose brain dysfunction.

A device sits on the patient's head, as up to 256 electrodes dotted around the skull observe the billions of neurons firing off every second. The collected data is sent to the cloud, where the BNA™ algorithms use innovative sets of signal-processing and pattern-recognition techniques to seek and map activated neural pathways. By projecting the individual data points into clusters, BNA™ creates three-dimensional images of Brain Network Activation patterns – allowing high-resolution visualisation of the complex neuro-physiological interconnections of the human brain at work.

This pioneering technology has uses beyond those it was intended for – such as monitoring disease progression, observing recovery from head injuries and understanding how the brain responds to a placebo.

ElMindA has completed several clinical trials, and BNA™ is already an integral part of the clinical development programmes at many of the top global pharmaceutical companies. The company is currently operating more than 15

BNA™ Labs in collaboration with leading neurological institutes in a variety of research fields.

EIMindA was named one of the World Economic Forum's Technology Pioneers for 2015, which will give it access to the most influential and sought-after business and political network in the world and allow it to continue to expand and enhance the possibilities of neurological research.

Image 'brain lobes' courtesy of aboutmodafinil.com.

Last updated: 25th of August, 2015