

Neuro580 Origin Story:

If you talk to Dr. Izzy Justice, founder and Chief Neuroscience Officer of Neuro580, there's a good chance you'll hear him say "I don't have that many opinions." It's a curious comment from someone who is clearly so passionate. But Izzy isn't saying he lacks conviction. No, he's saying that his beliefs are informed by data. His work is driven by facts and evidence. And it's that dedication to data that took Izzy on a winding path to Neuro580 and his current mission.

Following a number of years in corporate consulting and a Doctorate (DM) focused on human performance, Izzy made a career transition to focus on athlete performance. A golf enthusiast and multi-time Iron Man finisher (5 Fulls and 8 Halves), Izzy built a new career helping athletes of all kinds manage stress and focus on their emotional intelligence (EQ) to achieve better outcomes. And he was successful, earning the trust of professional athletes across the PGA tour, Major League Baseball, Basketball, NASCAR, and Collegiate Teams, while writing a number of books on the topic.

It's likely he would have continued in that direction, were it not for a breakthrough in how neuroscientists study brain activity. In 2015, Izzy learned about the invention of wireless Electroencephalogram (EEG) devices. These wearable devices provide real-time readings of brain activity and can be used virtually anywhere. By moving the EEG out of the hospital, Izzy saw an opportunity to examine his clients' brain function at the moment of action. In other words, does the EEG show different brain activity on a missed putt or free throw vs. a make?

Sure does. Time and again, EEGs showed that higher performance was correlated with a calmer brain state, with brain activity centered on 10Hz - alpha waves to neuroscientists. When brain activity increased in frequency, above 30Hz, performance suffered. **It turns out, reducing stress and performing at one's best ... are the same thing.**

With this clear correlation established, Izzy began to ask the question "How do we reach 10Hz?" Over the course of thousands of functional EEG scans, Izzy and his team developed hundreds of proven-effective "Neurohacks." These simple exercises combine performing a brief physical activity, recalling a happy memory and viewing a positive image. They can be done discreetly and completed in less than a minute, making them ideal for high-stress situations where performance is paramount.

Eventually, Izzy and his team recognized that athletes aren't the only people facing high-stress, time-sensitive situations, and Neurohacks could help more people. He realized that everything needed to perform a Neurohack was easily contained within their mobile device. Spark a memory, direct an activity, show a picture - a smartphone can supply it all. And so the Neuro580 app was developed to give people easy access to fully customized Neurohacks that can be used any time, any place. At present, Neuro580 is being used by some of the world's leading organizations, including The Centers for Disease Control and Prevention (CDC), has been integrated to Microsoft workplace calendar, and even into operating systems in hospitals so healthcare workers can always give their brain a break in 60 or less to reduce their stress and enhance their productivity.

