

# Sports and Neurofeedback: Unlock Peak Performance



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# Getting Started

## What is Neurofeedback?

Neurofeedback is a non-invasive computer-based technique that teaches the brain to function with optimal brain wave patterns. It's like a workout plan, but for the most important part of your body. Your brain!

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“Teams saw significant improvements in individual performance that showed up as major statistical improvements in their games.” — Carrie Forsyth, UCLA

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## How Does Neurofeedback Help Me?

Neurofeedback works in three steps. We provide a baseline assessment by getting a Quantitative EEG, or “brain map”. A brain map tells us how to best develop an individualized training protocol. Ongoing training is coupled with progress monitoring to help optimize brain function.

Benefits of neurofeedback training:

- Enhanced attention and focus
- Improved emotion regulation
- Improved quality of sleep

You've trained your body, why not train your brain? The average athlete will be able to stay “in the zone” during their most competitive moments and have better control over their mental game after completing 20 sessions of neurofeedback.

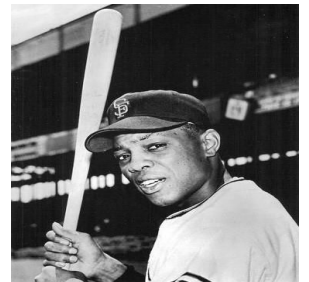
Not only does neurofeedback improve your performance, but it can also help with physical injuries like concussions, which can have severe effects long after the game is over.

Neurofeedback is like going to the gym. It's a natural way to train your brain to function better. It's not a performance-enhancing drug or method to cheat the system. Even Olympians use it!

# The Mental Game

**Break through the barrier your mind creates**

“What you are thinking, what shape your mind is in, is what makes the biggest difference of all.” ~ Willie Mays



“The most important attribute a player must have is mental toughness.”  
~ Mia Hamm

“The mind is the limit. As long as the mind can envision the fact that you can do something, you can do it, as long as you really believe 100 percent.”

~ Arnold Schwarzenegger



# The Basics...

## QEEG Brain Mapping



Quantitative Electroencephalography or “Brain Mapping” is a baseline assessment tool used to discover which areas of a client’s brain might be functioning at a suboptimal level. We then create a training protocol from the client’s baseline brain activity.

## Neurofeedback Training



Much like going to the gym, a client will come into the office for training sessions, during which they will play a game. The game is controlled by the brain waves being produced by the client in real-time. The sensors on the client’s scalp will detect the brain waves being produced and send that information to the computer. The computer then generates the visual/audio feedback to the screen.

## Enhanced Performance



The optimal brain activity produced in the session will become more stable and consistent over time, like a muscle. This typically takes 10 to 20 sessions.

# Well Researched...

Neurofeedback may sound like new-age science, but it's been around for over 50 years! Here are a few examples of actual improvements athletes have seen based on scientific research.

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*"Before doing the brain training I had a big temper on the golf course. Once I got on a bad streak, there was no turning back." – Brianna, UCLA study participant*

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## Golf

Neurofeedback helps improve focus, lessen stress, and anxiety when under pressure. "In a recent study by UCLA, neurofeedback helped experienced golfers hit 12% more greens in regulation and reduced putts needed by 9.7% per round." (Forsyth, 2018).

## Gymnastics

A study out of the University of Calgary showed improved balance beam performance in competition after gymnasts completed SMR and HRV biofeedback training.

## Ice Hockey

The same study also showed that ice hockey players improved their shooting performance by participating in neurofeedback sessions. Another out of the University of Vancouver also found improved shots on target for stationary and passed puck conditions.

### SOURCES:

Christie, and Sommer. "Neural Correlates of Performance and Neurofeedback Training in Ice Hockey Shooting."  
*PRISM Home*, Graduate Studies, 1 June 2018  
Carrie Forsyth. "Mental Game: Brain Training Study With UCLA Golf." Neuro Therapeutics Inc. 2018

## Used by the Pros...

### Jason Day



“Australian Jason Day, the current world number 11, has used neurofeedback for a number of years and said that it has yielded “a 110% improvement” in his mental game. So it may be no coincidence that he was ranked as the best putter on the 2018 PGA Tour.” (Cooke, 2019).

### Chris Kaman



Clippers’ center Chris Kaman attributed his All-Star season in 2014 to neurofeedback therapy. He revealed he was misdiagnosed with ADHD as a child, but neurofeedback helped him to improve his ability to focus.

### Kerri Walsh Jennings



Kerri Walsh-Jennings and her teammate Misty May-Treanor went on to win the London 2012 Olympic gold medal. They told the Wall Street Journal they used neurofeedback therapy to improve their mental game.

**Georgetown Psychology** is a dedicated team of clinicians with over 20 years of experience to provide you with the most integrative approach to care.

We know that treatment is personal. We're here to support our clients as they transition through life.

Let us help you understand what you need for better overall care and wellness.

- Evaluation Services
- Therapy Services
- Neurofeedback

## Contact Us

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