

## **Search for correlations of cycling and neurogenesis response in recruitment of new brain regions to support lost function in patients with Parkinson's disease**

### **Joe Williams**

This submittal is based on the work of a small team of professionals working together to help one of their clients. The client (Joe R. Williams) was diagnosed in 2010 with Parkinson's disease and made a deliberate decision to forge new pathways to maintaining his health and concurrently to use his engineering background as a tool in establishing new pathways for lost neurological connections. The use of a bicycle outfitted with specialized measuring devices provided insight into providing a quantifiable base line for ability to perform basic as well as advanced motor tasks. To date, data gathered over five years has not been subjected to deep analysis. However, clear indications exist that our proposed study will provide movement disorder specialists with information that can provide an alternative and non-pharmaceutical treatment for those suffering from the effects of early to mid-stage Parkinson's disease.