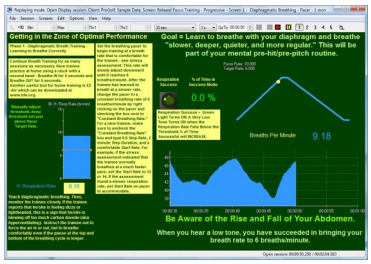
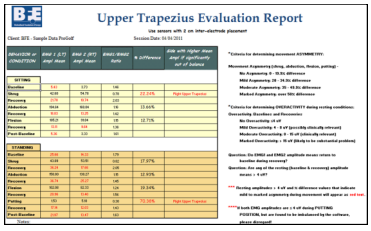
ProGolf Suite

Jane Arave, Wes Sime, PhD and Harry van der Lei, PhD





Limited Edition Software Suite

The ProGolf Suite was a collaborative creation between Jane Arave, Wes Sime, PhD, and Harry van der Lei, PhD, in their pursuit to create a formal assessment and training program for amateur golfers. The software is based heavily on Ms Arave's 'Mental Game of Golf' program, as well as the experience of all the authors working with golfers of various levels. This software package is of interest to coaches, trainers and clinicians that wish to enhance the performance of their golfers using a variety of techniques which include mental skills training, mind-body awareness training and self-regulation skills. The suite includes:

- Stress Assessment script that records the psychophysiologic stress reactions of a subject over 14 golf-themed stress-inducing tasks and accompanying recoveries (duration of 24 minutes). Instructions are included throughout the assessment.
- Upper Trapezius Evaluation script for assessing muscle asymmetry and elevated resting tension between upper trapezius muscles, by comparing resting muscle tonus to that of specific simple movement exercises. (duration of 11 minutes).
- Excel reports (2 of them) for specialized graphing and arranging relevant statistics from the two scripts, in an easy-to-read manner. Notes are included in the reports for interpretation of the results.
- Resonant Frequency Detector for measuring the exact respiration rate an individual should imitate in order to produce the highest heart rate variability, and therefore the greatest relaxation & recovery response.
- Relaxed progressive focus training screens, which are a set of 5 screens that teach self-regulation in a step-wise manner of increasing difficulty. They begin with respiration and eventually integrate all other modalities and mental skills training. Directions for the trainer and golfer are included on-screen.
- Upper Trapezius retraining screens for eliminating muscle asymmetry and elevated tension, to increase fluidity movement and avoid hooks/slices.
- "Extra" training screens for specific single modalities and EEG bandwidth training.

Education & Training Opportunities

The BFE offers three different types of online lessons/sessions designed to meet your diverse education and training needs. All sessions provide continuing education (CE) credits to psychologists.

- 1-Hour **Introduction to the ProGolf Suite Webinar**: Jon Bale, BFE Research Manager, reviews the software and documents included in the "ProGolf Suite" from pre-assessment to training. The webinar covers the following items: authors, purpose of the suite, necessary equipment, Stress Assessment, Upper Trapezius Evaluation, Resonant Frequency Detector, different types of training screens, and suite documents.
- 6-Hour **ProGolf Assessment Class** and 6-Hour **ProGolf Training Class**: these two separate classes are well suited for practitioners that wish to use the ProGolf Suite methods in their practice. The software will be covered in great detail, and recorded data will be reviewed to ensure proper recording. Interpretation of data by the instructor will occur, however focus is maintained on being able to successfully use the software and equipment. This first class covers the two assessments & excel reports (over four 1.5-hour sessions), while the second class covers the resonant frequency detector and training screens (over four 1.5-hour sessions). Sign up for both classes are separate.
- 3-Hour **ProGolf Case Conferences**: attend three live 60-minute online sessions and take the opportunity to ask the opinion of a qualified instructor, who is familiar with the ProGolf Suite, on case examples from practice, while reviewing excel report data and training plan strategies. We strongly encourage attendees to bring in their own case examples for review.

For more Information or Questions:

greengolfing@gmail.com

To purchase the suite and/or education & training, go to the BFE Shop:

www.bfe.org/buy

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BioGraph Infiniti Software

BioGraph Infiniti Software is the core of all current and future Thought Technology biofeedback and psychophysiology products. It provides a multimedia rich graphical experience, while capturing and analyzing raw data. It includes all the features and functions required to run our specialized suite and offers the ability to customize your own screens using the Developer Tool. The suite functions with **BioGraph Infiniti version 5.1.4** or **6.0**, and is designed to provide full compatibility with the latest Windows 8 operating system.

Choose the Encoder to Meet Your Needs

You need one encoder to run the software:

- **ProComp Infiniti encoder** is the eight-channel, multi-modality encoder that has all the power and flexibility you need for real-time, computerized biofeedback and data acquisition in any clinical setting. We only ever use two sensors with this suite.

Select Sensor Measurements for Collecting Data

This list consists of the all sensors necessary for running the suite. Less than the full set of sensors can be used with the suite as well, with exceptions noted below.

- **MyoScan-Pro sensors (x2)** are pre-amplified surface electromyography sensors for measuring muscular tension.
- **BVP sensor (x1)** is a blood volume pulse detection sensor (otherwise known as a PPG sensor) housed in a small finger worn package, to measure heart rate & heart rate variability. The suite can run with either the BVP and EKG sensor.
- **EKG sensor (x1)** is a pre-amplified electrocardiograph sensor, for directly measuring heart electrical activity, which in turns gives us heart rate and heart rate variability information. The suite can run with either the BVP and EKG sensor.
- **Respiration sensors (x1)** are durable, latex girth belt for monitoring respiration rate, waveform and amplitude sensor.
- **Skin Conductance (x1)** sensor measures the conductance across the skin, and is normally connected to the fingers.
- **Temperature sensor (x1)** measures skin surface temperature between 10°C – 45°C (50°F - 115°F).
- **EEG-Z sensor (x1 or x2)** is pre-amplified electroencephalograph sensor with built in impedance checking, for measuring brainwaves. **EEG monopolar/bipolar kit with DIN cable** is also necessary to use this sensor. This second sensor is optional.

Disposable Electrodes for Sensors

Disposable electrodes are required for using the MyoScan-Pro and EKG sensors, as well as are a viable idea for use with the skin conductance sensor. The MyoScan-Pro sensors have two potential electrode placement types, so there are also two types of electrodes for purchase. The **triode** disposable electrode (A) is used for narrow placement and the **unigel** (B) for wide electrode placement.

The use of the EKG sensor requires the purchase of **unigel** electrodes (B). When a skin conductance sensor is used with a disposable electrode, it should be the **unigel** (B) as well.

Additional Computer Monitor Setup

The entire ProGolf Suite can be used with either a 1 or 2-monitor setup. We suggest using the Relaxed Progressive Focus training screens with a 2-monitor setup.