PROBASEBALL SUITE
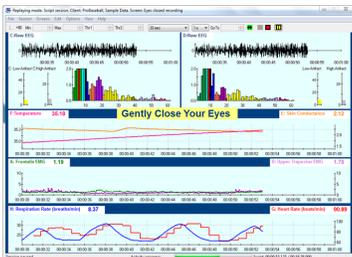## JANE ARAVE, WES SIME, PHD, BEN STRACK, PHD, PEDRO TEIXEIRA

Limited Edition Software Suite

The ProBaseball Suite was a collaborative creation of the Biofeedback Federation of Europe's ProBaseball team, which consists of Jane Arave, Wes Sime, PhD, and Ben Strack, PhD, and Pedro Teixeira. The suite's purpose is to create a formal assessment and training program for amateur and professional baseball players. This software package should be of interest to coaches, trainers and clinicians that wish to enhance the performance of their players using a variety of techniques which include mind-body awareness training and self-regulation skills. The software components of the suite can be split into two separate components, of which clinicians may be interested in one or both parts. The suite includes:

Stress Assessment & Training component

- Stress Assessment script that records the psychophysiologic stress reactions of a subject over 14 baseball-themed stress-inducing tasks and accompanying recoveries (duration of under 19 minutes). Instructions are included throughout the assessment.
- Excel report arranges relevant data from assessment into easy-to-read graphs and tables. Notes are included in the report 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. Directions for the trainer and golfer are included on-screen.
- "Extra" training screens for specific single modalities and EEG bandwidth training.

Reaction Time Assessment & Training component

- Reaction Time Assessment and Training screens record the reaction speed and discrimination ability of the individual for several different reaction target practice protocols.
- Excel report displays the reaction time results in an easy-to-read manner.

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 ProBaseball Suite Webinar**: Jon Bale, BFE Research Manager, reviews the software and documents included in the "ProBaseball Suite" from assessment to training. The webinar covers the following items: authors, purpose of the suite, necessary equipment, Stress Assessment & Training, and Reaction Time Assessment & Training.

- 6-Hour **ProBaseball Online Class**: these four 90 minutes sessions are well suited for novice or experienced practitioners that wish to use the ProBaseball 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. Depending on the interest of the attendees, more focus can be made on one component of the suite's software (such as more emphasis on reaction time over the stress assessment).

- 3-Hour **ProBaseball 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 ProBaseball Suite and working with amateur or professional baseball players, 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.

Please notify the BFE shop (shop@bfe.org) if you wish to make arrangements for other times of online instructions or guidance.

For more Information or Questions:

**blueprobaseball
@gmail.com**

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

www.bfe.org/buy

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. They are split according to which software component uses them (not all users will use both components).

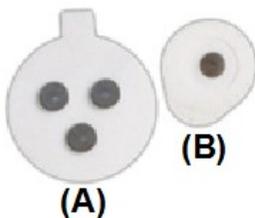**For using the Stress Assessment & Training component**

- **MyoScan-Pro sensors (x2)** are pre-amplified surface electromyography sensors for measuring muscular tension.
- **BVP sensor (x1)** is a blood volume pulse sensor (also known as a PPG sensor), to measure heart rate data. The suite can run with either the BVP or EKG sensor.
- **EKG sensor (x1)** is a pre-amplified electrocardiograph sensor, for directly measuring heart electrical activity. The suite can run with either the BVP or 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.

For using the Reaction Time Assessment & Training component

- **TT-AV Sync (x1)**, with accessories, is a highly accurate time-synchronizing device for making measurements of audio and video events produced by a PC. The AV Sync is used in evoked and slow cortical potential protocols, and reaction time testing to provide the ability to make measurements with millisecond accuracy.
- **Push button (x1)** is a tool for reaction time marking.

Disposable Electrodes for EKG & MyoScan-Pro sensors

Disposable electrodes are required for the MyoScan-Pro and EKG sensors. Unigel (B) electrodes are used with the EKG sensor, while the triode (narrow placement - A) or unigel (wide placement - B) can be used with the MyoScan-Pro sensors.

Additional Computer Monitor Setup

The Reaction time component of the software requires a 2-monitor setup for proper functioning. The Stress Assessment component of the software can use a 1 or 2-monitor setup.