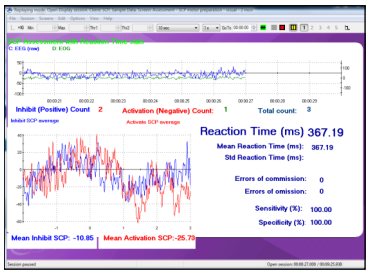
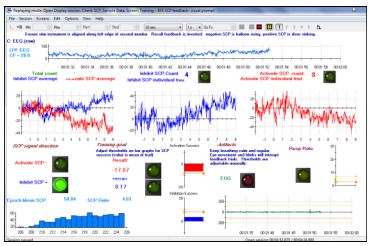
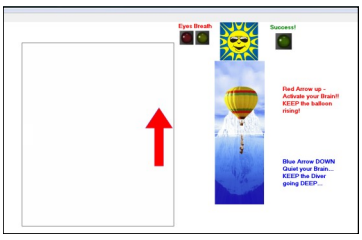
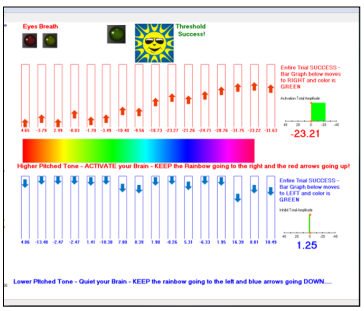
Slow Cortical Potentials Suite









Limited Edition Software Suite

This Slow Cortical Potentials Suite is a perfect starting point for educators, practitioners and researchers who want to measure Slow Cortical Potentials (SCPs). The software is based on extensive research conducted in Germany at the University of Tubingen where the effects of self-regulation of slow cortical potentials for children with attention-deficit/hyperactivity disorder were examined. According to Dr. Ute Strehl, "slow cortical potentials are slow event-related direct-current shifts of the electroencephalogram. Slow cortical potential shifts in the electrical negative direction reflect the depolarization of large cortical cell assemblies, reducing their excitation threshold. This training aims to regulate cortical excitation thresholds considered to be impaired in children with attention-deficit/hyperactivity disorder". The software is also potentially useful with migraine and seizue sufferer. This suite was a collaborative effort between the BFE's Elizabeth Tegan and Thought Technology's Marc Saab. The suite includes:

- Over 50 training and assessment screens, spread across 7 different SCP protocols. Protocols are organised in graduated steps, with either audio of visual stimuli.
- Screens include a large amount of statistical detail, however the visual interface for the client is designed with a simple series of feedback animations for indicating the subject's ability to inhibit or activate.
- Therapists can select between high and normal resolution screen types, according to which size fits best to their monitors. No more need for looking at tiny instruments on a giant computer monitor.
- Optional of two sensors, depending on the desire of the therapist:
  - Electrooculogram (EOG) sensor to avoid contamination of EEG data by eye-blinks
  - Respiration sensor for indication of client's arousal.
- Reference files, articles, sample client data and a software manual, written by Elizabeth Tegan, are all included in the suite documents. These materials should provide a clinician with an initial foundation of understanding SCP training and how to use this software.

Note: Use of the suite requires a 2-monitor computer setup.

Education & Training Opportunities

The BFE currently offers one type of online lesson/session designed to meet your diverse education and training needs. All sessions provide continuing education (CE) credits to psychologists.

- 6-Hour **Slow Cortical Potentials Online Class**: four 90 minutes sessions of online instruction from a qualified instructor experienced with slow cortical potentials (SCPs) on the use of SCP assessment and training measurement with a clinical population. The complex nature of SCPs makes this class well suited for practitioners that are experienced with neurofeedback, who want to incorporate SCPs and the SPC Suite into their practice or research methods. The theory of slow cortical potentials will be covered, as well as a cursory glance at evoked potentials. All aspects of using 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 all aspects of the software and equipment.

If you are interested in arranging other types of qualified instructor-guided lessons, then the BFE would gladly do so. Please contact the BFE Shop (**shop@bfe.org**) do make such arrangements.

For more Information or Questions:

bluepotential@gmail.com

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

www.bfe.org/buy

SLOW CORTICAL POTENTIALS SUITE

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 Slow Cortical Potentials 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 the 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 that can be used with the suite.

- **EEG-Z3 sensor (x1)** is a pre-amplified electroencephalograph sensor with built in impedance checking, for measuring brainwaves. **DC-EEG monopolar/bipolar kit with DIN cable** is also necessary to use this sensor.
- **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.
- **Respiration sensor (x1 optional)** is a durable, latex girth belt for monitoring respiration rate, waveform and amplitude sensor.
- **EEG-Z sensor (x1 optional)** is pre-amplified electroencephalograph sensor with built in impedance checking, for measuring brainwaves. This sensor is co-opted as an electrooculogram (EOG) sensor, for monitoring eye movements artifacts. An **electrode extender cable** is necessary for use with this optional sensor, along with disposable electrodes.

Disposable Unigel Electrodes

If making use of the optional EEG-Z sensor that is co-opted as an EOG sensor, it is necessary to purchase **unigel electrodes** for the EOG electrode placement.

Additional Computer Setup Information

The Slow Cortical Potentials Suite requires the use of a 2-monitors computer setup.