

Psychophysiology Applications using a BIOPAC MP System

- Abstract:* This hands-on tutorial will demonstrate the power and flexibility of the BIOPAC MP150 data acquisition and analysis system and the NEW BIOPAC BioHarness telemetry and data logging system for typical psychophysiological applications: ANS recordings; Evoked Response Studies (VER, AER & SER); Event Related Potentials (P300); Sexual Arousal Studies; Heart Rate Variability; Startle Eye Blink Tests; plus a host of other biopotential and transducer recordings.
- Learn how to use an MP System to record a wide variety of ANS functions, including heart rate, skin conductance/resistance/temperature, muscle tension, neuronal activity, and eye movement. Display measurements (e.g., *mean value* and *standard deviation*) during or after data collection.
- Perform detailed event related potential (ERP) studies using a variety of stimulus options, including virtual reality, image presentation, video clips, sound, and somatosensory stimulation. Combine physiological and psychological (self-assessment) responses. Enter equations to combine multiple physiological variables for automatic assessment, or choose from preset calculations for simplified setup. Mark events and write comments as they occur or after the fact, and easily generate presentation quality results.
- AcqKnowledge* provides scoring and automation routines for EDA, ECG, HRV, LVET, RSA, EMG, EEG, Stimulus Response, Impedance Cardiography (dZ/dt classifier: B, C, X, Y, O points), etc.
- An overview of the Educational tools will demonstrate how the *Biopac Student Lab* facilitates learning and aids in the development of analytical and critical thinking skills. Automatic calibration routines and embedded sensor technology minimize frustration. The BSL System optimizes lab time by reducing setup by up to 90% so students can focus on understanding results. We include fundamental lessons, plus we'll show how to easily create your own protocol or allow students to perform their own research projects.
- New VR platform, video synchronization, and logging options. Come learn how BIOPAC MP Systems support an array of applications, techniques, and equipment in behavioral research.
- Audience:* This tutorial is aimed at new and existing users and others interested in adopting BIOPAC solutions for life science data acquisition and analysis for their research and education needs.
- Why Include:* This tutorial belongs at Measuring Behavior 2008 because BIOPAC MP Systems support an array of applications, techniques, and equipment in behavioral research and education.
- Instructors:* Frazer Findlay, BIOPAC Systems, Inc.
- Résumé:* Short (one paragraph) résumé of the instructor:
- Frazer Findlay (BIOPAC Systems, Inc.) has more than 18 years experience in life science data acquisition and analysis. He has facilitated workshops for a wide array of applications in the U.S., Europe, and Asia, and is familiar with software, equipment, and laboratory protocols for human and animal subjects.
- Duration:* 90 minutes