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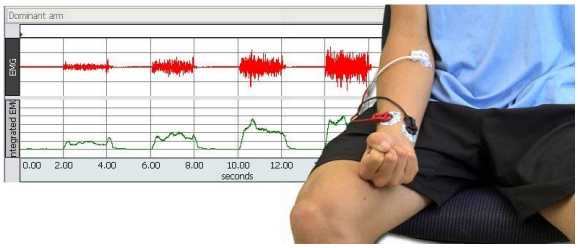
BSL HOME DISTANCE LEARNING SOLUTION—SPECIALIZED INDEPENDENT LEARNING MODULE (BSL-HOME)

BSL Student Lab Home enables students to conduct hands-on physiology labs in the safety of their own home, dorm room, or any remote location while social distancing and stay-at-home orders keep them out of campus labs. A complete lab solution for instructors and students to preserve practical lab experience.

- *For instructors*—BSL Home makes it **easy for instructors to continue running practical labs** and for students to gain critical practical skills. BSL's curriculum and guided lessons provide educators with an out-of-the-box teaching solution that's ready to use on day one. It provides physiology lessons on heart signals (ECG), brain waves (EEG), muscle activity (EMG), eye movement (EOG), and Respiration. BIOPAC manages student orders, delivery logistics, consumables, support, and safe handling of all items.
- *For students*—**Students are fully engaged** before, during, and after the lab. Extensive multi-media pre-lab materials familiarize the student with procedures, hardware, software, and model results. During the lab, students record data from their own bodies, BIOPAC ships the small, lightweight, hand-held MP41 device with integrated Biopac Student Lab software directly to the student. Students learn by doing—they are guided through lessons with step-by-step instructions in the software to record data from their own bodies. Once they have collected the data, they submit it to the instructor for review and feedback. Students then ship the device back to BIOPAC for testing and sanitizing when the lab work is completed.
- *BSL Home* includes a compact, single-channel MP41 Data Acquisition Unit, 40EL Electrode Lead Set, BSL 4 Software, and EL503 pre-gelled general purpose Disposable Electrodes.

Biopac Student Lab



Biopac Student Lab is the premier choice for life science education, used in top universities around the world. BSL Home enables students to actively participate in science labs—let's talk about bringing it to your students, wherever they are!

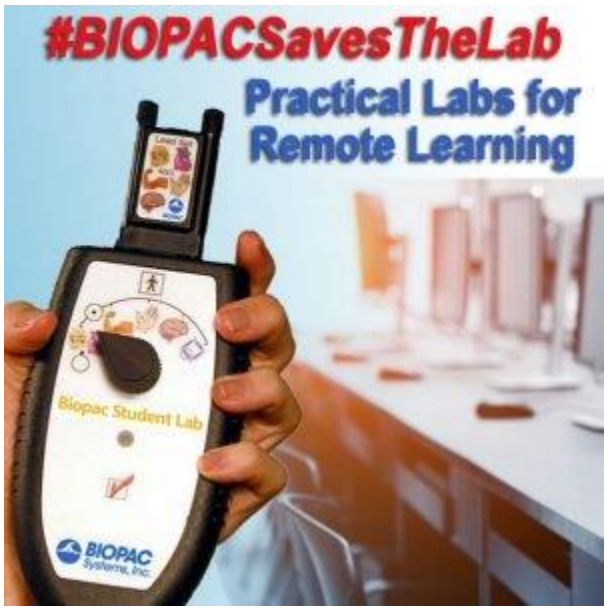
NOTE: BSL HOME requires Biopac Student Lab 4.1.5 or higher—check compatibility.

Currently shipping to USA only.

Updated: 8.20.2020

BSL HOME MAINTAINS HANDS-ON LEARNING FOR SOCIALLY-DISTANCED STUDENTS

Students Learn by Doing. Students follow guided instructions and collect data from their own bodies. Extensive multi-media pre-lab materials familiarize the student with procedures, hardware, software, and model results. Once students receive their BSL Home unit, they can run up to nine practical labs. After data is collected, they submit it to the instructor for review and feedback.



L01 Electromyography (EMG) I — *Standard & Integrated EMG*
Students investigate the properties of skeletal muscle by measuring maximum clench strength.

L02 Electromyography (EMG) II — *Motor Unit Recruitment & Fatigue*
Students lift weights to examine motor unit recruitment and skeletal muscle fatigue.

L03 Electroencephalography (EEG) I —*Relaxation & Brain Rhythms*
Introduces students to electroencephalography by recording from the occipital lobe.

L04 Electroencephalography (EEG) II — *Alpha Rhythms in the Occipital Lobe*
Students discover how the brain constantly receives and integrates sensory input.

L05 Electrocardiography (ECG) I — *Components of the ECG*
Introduces students to electrocardiography and the recording of the heart's electrical signals. Bipolar Leads, Einthoven's Law, Mean Electrical Axis on the Frontal Plane. Explains Einthoven's triangle while students perform tasks designed to change the rhythm of the heart.

L08 Respiratory Cycle I — *Respiratory Rates, Relative Depths of Breathing, Regulation of Ventilation*
Students observe and record EMGs from thoracic respiratory skeletal muscle during eupnea and voluntary apnea.

L10 Electrooculogram (EOG) I — *Eye Movement; Saccades & Fixation*
Students record eye movements during real and simulated tracking of a pendulum. Horizontal plane.

L14 Biofeedback —*Relaxation & Arousal*
Explores the concept of biofeedback training and its effect on autonomic control of heart rate.

L15 Aerobic Exercise Physiology — *Cardiovascular & Respiratory Adjustments During and After Exercise*
Students record ECG and HR to see how the electrical activity of the heart and heart rate change.