

Application Description

BIOPAC's advanced biomechanics research systems increase subject comfort with comfortable acquisition hardware and minimize cumbersome wiring using industry-leading analysis software. Researchers can record body movement data for extended periods or trigger recordings when movement occurs (e.g., karate kick), in both laboratory and field environments, with advanced wired and wireless biomechanical data acquisition and analysis systems.

Advanced Features

- Actigraphy
- Automated EMG Analysis
- H Reflex Methodology
- Ergonomics Evaluation
- Isotonic Contraction
- And [More](#)

Watch an on-demand [Biomechanics Webinar](#) at the [BIOPAC Website](#)!

Selected Research Citations Below

[Search online](#) for more than 6,920 BIOPAC citations for *Biomechanics*

The External Validity of a Novel Contract-Relax Stretching Technique on Knee Flexor Range of Motion

Anthony D. Kay, et al (2020). Scandinavian Journal of Medicine and Science in Sports, Vol 30, Issue 1

Rapid Hamstrings to Quadriceps Ratio at Long Muscle Lengths in Professional Football Players with Previous Hamstring Strain Injury

Paulo Correia, et al (2020). European Journal of Sports Science

Performance Fatigability and Neuromuscular Responses for Bilateral Versus Unilateral Leg Extensions in Women

John Paul V. Anders, et al (2020). Journal of Electromyography and Kinesiology, Vol 50

Ankle Muscles Activation and Postural Stability with Star Excursion Balance Test in Healthy Individuals

Dmitris N. Karagiannakis, et al (2020). Human Movement Science, Vol 69

Acute Effects of Unilateral Self-Administered Static Stretching on Contralateral Limb Performance

David G. Behm, et al (2019). Journal of Performance Health Research, Vol 3, Issue 1

Impact of 10-Minute Interval Roller Massage on Performance and Active Range of Motion

Daniel D. Hodgson, et al (2019). Journal of Strength and Conditioning Research, Vol 33, Issue 6

Immediate Effects and Associations Between Interoceptive Accuracy and Range of Motion after a HVLA Thrust on the Thoracolumbar Junction: A Randomised Controlled Trial

Ffian Cian Griffiths, et al (2019). Journal of Bodywork and Movement Therapies, Vol 23, Issue 4

Effects of Pregnancy on Lumbar Motion Patterns and Muscle Responses

Gemma Biviá-Roig, et al (2019). The Spine Journal, Vol 19, Issue 2

Are Landing Biomechanics Altered in Elite Athletes with Chronic Ankle Instability

Jian G. Lin, et al (2019). Journal of Sports Science and Medicine, Vol 18

Caffeine Increases Rate of Torque Development Without Affecting Maximal Torque

Brent M. Peterson, et al (2019). Journal of Science in Sport and Exercise