



SPORTS BIOMECHANICS

Service directed at programming and optimising sports training using novel procedures which allow key parameters to be recorded in different modes, as well as identification of indicators of performance or injury prevention. The sports biomechanics service is divided into: training process monitoring; clinical evaluation, assessment and rehabilitation with interactive dynamic virtual reality systems (MOTek); isokinetic and isometric assessment of neuromuscular potential; and functional analysis of postural balance.

Main feature / technology

Analysis of sports gestures using kinetic and kinematic data and anthropometric measurements using real-time movement capture systems. Capturing the dynamic of the pressure centre, with instantaneous feedback, foreseeing the risk of falls thanks to an instrumented treadmill with force platform, to simulate different environments of activity. Analysis of neuromuscular potential through evaluation of muscle contraction. Recording variations in the pressure centre to assess postural control capability. Possibility of characterisation



Status of the technology:

Available for demo

Area:

Health and wellness

Main applications and advantages :

Applications in analysis of training technique, such as guidelines for improving performance, avoiding injury, correction of technique and detection of sports talents.

Improvements in training and stability, fall prevention, neurorehabilitation and gait rehabilitation.

Evaluation of neuromuscular potential, injury prevention, enhancement of sports performance and functional readaptation.

Functional assessment and evaluation of postural balance. Evaluation of sports practitioners for injury prevention, improving sports performance and readjustment.

Information:

To get in touch with the people in charge of this offer, please contact FUNDECYT-PCTEx by email:

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