ISBS 2011 PORTO PORTUGAL

Best Practices for Recording the sEMG Signal @ ISBS 2011

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&
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Time, Date and Venue

Monday 27th 2011, 3:30 PM – 5 PM. The Faculty of Sport of the University of Porto

Part 1: Fundamentals - Best Practices for Recording the sEMG Signal

Professor Carlo J De Luca
Dr. Paola Contessa, Boston University, USA

60 min

The workshop is designed for researchers in Sports Biomechanics and Motor Control with an emphasis "best practices" for recording sEMG signals. Researchers who are not yet comfortable with the use of Electromyography, or who wish to learn the rationale for EMG recording procedures and specifications, or who require a refresher are encouraged to attend.

Participants will be encouraged to ask questions throughout the presentation.

The workshop will address two issues that have a fundamental bearing on the successful outcome of any investigation that employs the use of the surface EMG signal (sEMG). The first is the design of the sensor for recording the sEMG signal, and the second is the methodology or the "best practices" required to obtain signals with minimal contamination from extraneous noise sources. The authors will provide recommendations for reducing the contamination of the sEMG, justified with empirical evidence.

Part II: Hands on demonstration – sEMG Data Acquisition and Analysis in Sports Biomechanics

Professor Jim Richards, University of Central Lancashire, UK
Dr. Paola Contessa, Boston University, USA

30 min

This workshop will include hands on experience of the methods and measurements commonly used to assess muscle function in sports applications and an exploration of some of the complications and confounding factors that we have to deal with on a day to day basis when using EMG.

The hands on workshop will explore acquisition and analysis of EMG signals using EMGworks script®

What to bring: You are encouraged to bring a Laptop with preinstalled EMGworks®. The attendees can preinstall the EMGworks from Delsys website http://delsys.com/Products/EMGworks.html after June 1, 2011.

Pre-recorded data for analysis will be used to construct some examples.

Demonstration of EMG instruments: Attendees will have the opportunity to explore various sEMG instruments during the demonstration.

Whom to contact for additional info and registration:

Delsys - EMGworkshop@gmail.com

Or

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