#### **Workshops Overview**

#### Friday, 29th June

9:30 - 12:30



International Society of
Electrophysiology and Kinesiology
UNIVERSITY COLLEGE DUBLIN
JUNE 29th – JULY 2nd 2018

#### **Morning Workshops**

Workshop 1: Methods for estimating synaptic potentials in human muscular system

Organisers: Kemal S. Türker, Gizem Yilmaz, Gorkem Ozyurt, Betilay Topkara and B.Selen Senocak, Koç

University School of Medicine, İstanbul, Turkey

Workshop 2: Extraction of information from high-density EMG: recent developments and perspectives

Organisers: Dario Farina Ales Holobar

Imperial College London University of Maribor

Workshop 3: Wearable Technologies - Challenges & Advances

Organisers: Brian Caulfield

University College Dublin

12:30 - 14:00 Lunch

Afternoon Workshops

Workshop 4: How good is my robot? The increasing importance of benchmarking in wearable robotics research

Organisers: Diego Torricelli, Jan Veneman, Jose Luis Pons

Cajal Institute Spanish National Research Council

Workshop 5: Surface EMG alive – an update of the current lines of application in real life settings

Organisers: Catherine Disselhorst Klug, Aachan University and Karen Sogaard

University of Southern Denmark

Workshop 6: Developing a subject-specific tri-dimensional model of human muscles, from experimental anatomical and physiological data

Organisers: Leonardo Gizzi, Oliver Röhrle, Ekin Altan, Okan Avci, Filiz Ates

University of Stuttgart, Germany

14:00 - 17:00

## **Programme Overview**

## Saturday, 30<sup>th</sup> June



International Society of
Electrophysiology and Kinesiology
UNIVERSITY COLLEGE DUBLIN

JUNE 29th - JULY 2nd 2018

Time								
8:30	Keynote 1 Roger Enoka - Basmajian Award							
9:00	(8:30-9:30)							
9:30	Reflexes & Neural Pathways I	Symposium: High Density Surface EMG: A Non-Invasive Research Tool at the Transition to Clinical Applications	Symposium: Muscle Stiffness and Extensibility: How Do They Affect Muscle Function?	Rehabilitation Therapies and Technologies	Motor Control I - Muscle Synergies			
10:00								
10:30								
11:00	Coffee & Poster Session							
11:30	(11:0-12:00)							
12:00	Knee Biomechanics and	Symposium : Why Are Muscles	Back, Neck and	Motor	Gait &			
12:30	Rehabilitation I	Weak After Stroke?	Shoulder Pain I	Control II	Posture I			
13:00	Lunch							
13:30	(13:00-14:00)							
14:00	Keynote 2 Todd Kuiken							
14:30	(14:00-15:00)							
15:00	Symposium :Multimodal	Symposium : Biomechanical						
15:30	Biomarkers of Motor Performance, Impairment	and Clinical Challenges in the	Knee biomechanics and	EMG Modeling and	Motor			
16:00	and Recovery Derived from Physiological Measurements	Shoulder from the Applied Perspective	Rehabilitaiton II	Processing I - Modelling	Units			
16:30	Coffee & Poster Session							
17:00	(16:30-17:30)							
17:30	Keynote 3: Apostolos P. Georgopoulos							
18:00	(17:30-18:30)							

### **Programme Overview**

# Sunday, 1st July



International Society of
Electrophysiology and Kinesiology
UNIVERSITY COLLEGE DUBLIN
JUNE 29th – JULY 2nd 2018

Time								
8:30	Keynote 4 Cathy Stinear (8:30-9:30)							
9:00								
9:30	Symposium: EMG Signal Decomposition: Validation and		Symposium: Ultrasound					
10:00	Impact In Our Physiological Understanding of Neural	Reflexes & Neural Pathways II	Elastography – What Are We Measuring in Muscle?	Sport Biomechanics	Clinical Neuromechanics			
10:30	Control of Movement		rieasuring in riuscie:					
11:00 11:30	Coffee & Poster Session (11:0-12:00)							
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12:00	Symposium : Novel Approaches to Enhance Recovery After	Back, Neck and	Motor	Gait &	EMG Modeling and Processing			
12:30	Central Nervous System Injury	Shoulder Pain II	Control III	Posture II	II - Signal Analysis			
13:00			Lunch					
13:30		(13:00-14:00)						
14:00		Keynote	5 Walter Herzog - Carlo De Luca mei	morial				
14:30			(14:00-15:00)					
15:00		Symposium : An Increased Reliance on Contralesional	Symposium : Neuromechanics					
15:30	Fatigue I	Cortico-reticulospinal Motor Pathways and Sensorimotor Impairments following a	of Joint Stability After Anterior Cruciate Ligament	Muscle and Force				
16:00		unilateral brain injury: Good or Bad?	Reconstruction					
16:30	Coffee & Poster Session (16:30-17:30)							
17:00								
19:30								
20:00	Conference Dinner in Guinness Storehouse (pick up at 7.30 for 8 pm start)							
22:30								

### **Programme Overview**

# Monday, 2<sup>nd</sup> July



International Society of
Electrophysiology and Kinesiology
UNIVERSITY COLLEGE DUBLIN

JUNE 29th - JULY 2nd 2018

Time							
8:30	Keynote 6 Peter Brown (8:30-9:30)						
9:00							
9:30	Symposium: Neuromechanical	Symposium : New Insights into					
10:00	Adaptations After Training and Exercise	Trunk Control in Back Pain Through Novel Approaches	Fatigue II	Gait & Posture III	Myoelectric Control		
10:30							
11:00	Coffee & Poster Session (11:00-12:00)						
11:30							
12:00	Motor	Symposium : Insights into Cognitive Processes from	EMG Modeling and Processing	Wearable Sensors &	Knee biomechanics and		
12:30	Control IV	Motor System Measurements	III - Signal Analysis	Accelerometry	Rehabilitaiton III		
13:00	Lunch / ISEK General Assembly						
13:30	(13:00-14:00)						
14:00	Keynote 7 Taija Finni (14:00-15:00)						
14:30							
15:00	Movement Disorders	Symposium :Moving Beyond the Physical: Addressing Musculoskeletal Injury Induced Neuroplasticity and Motor Control to Improve Patient- function	Symposium: Neuromechanics of LowerLimb Amputation and Prosthetic Gait	Sensors	Back, Neck and Shoulder Pain III - Shoulder and Neck		
15:30							
16:00							
16:30	Coffee & Poster Session (16:30-17:30)						
17:00							
17:30	Award Ceremony						
18:00	Award Ceremony						