



# ISEK 2026 POSTER LISTINGS

P1: 26 June, 12:00 – 13:00 P2: 27 June, 13:00 – 14:00

<b>ID</b>	<b>Title</b>	<b>Authors</b>	<b>Author Affiliations</b>
22524	P1-A-1 - Co-contraction training is as effective as traditional resistance training in promoting hypertrophy in older adults: a controlled study	Matheus Gomes <sup>1</sup> , Marina Villalba <sup>2</sup> , Rafael Fujita <sup>3</sup> , Julia Faria <sup>4</sup> , Veronica Miyasike-Dasilva <sup>5</sup> , Renato Moraes <sup>6</sup>	<sup>1</sup> University of São Paulo, <sup>2</sup> University of São Paulo, <sup>3</sup> Memorial University of Newfoundland, <sup>4</sup> Faculty of Medicine of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil, <sup>5</sup> Faculty of Kinesiology and Recreation Management, University of Manitoba, Winnipeg, Canada, <sup>6</sup> School of Physical Education and Sport of Ribeirão Preto, University of São Paulo
22718	P1-A-2 - Central and peripheral variability in older adults	Raphael Mesquita <sup>1</sup> , Sina Salehpour <sup>1</sup> , Marine Moulin <sup>1</sup> , Alessandro Eburnea <sup>2</sup> , Michael Trivilini <sup>1</sup> , Mario Nuñez-Lisboa <sup>3</sup> , Arthur Dewolf <sup>4,5</sup>	<sup>1</sup> Laboratory of Physiology and Biomechanics of Human Locomotion, IoNs, UCLouvain, Belgium, <sup>2</sup> Department of Public Health, Experimental Medicine and Forensic Sciences, University of Pavia, Italy, <sup>3</sup> Exercise Science Laboratory, School of Kinesiology, Faculty of Medicine, Universidad Finis Terrae, <sup>4</sup> Università degli studi di Tor Vergata, <sup>5</sup> UCLouvain
24005	P1-A-3 - Are there age and sex related differences in tibialis posterior activation during walking when normalised to maximum voluntary contraction?	Joanna Reeves <sup>1</sup> , Neil Postans <sup>2</sup> , Catriona Heaver <sup>2</sup> , Caroline Stewart <sup>2</sup>	<sup>1</sup> Swansea University, <sup>2</sup> RJA Orthopaedic Hospital NHS Foundation Trust
24771	P1-A-4 - Short-term Reliability of Center of Pressure and Lower-Limb EMG Activities during Single Leg Stance	Hyun Kyoon Lim <sup>1</sup>	<sup>1</sup> Korea Research Institute of Standards and Science
24948	P1-A-5 - Associations of motor unit remodeling with current muscle strength and longitudinal muscle strength decline in older adults	Masahiro Kuniki <sup>1</sup> , Kaito Igawa <sup>1</sup> , Yu-Ichi Noto <sup>2</sup> , Kohei Watanabe <sup>1</sup> , Ryosuke Takeda <sup>1</sup>	<sup>1</sup> Chukyo University, <sup>2</sup> Kyoto Prefectural University of Medicine



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25431	P1-B-6 - Identifying spinal motor unit properties in-vivo using electrophysiological digital twins	Pranav Mamidanna <sup>1</sup>	<sup>1</sup> Imperial College London
22525	P1-B-8 - Can machine learning evaluation of physical behaviour accurately identify cases of motor neurone disease?	Nina Mitic <sup>1</sup> , Amina Chaouch <sup>2,3</sup> , Chuin Hong Yap <sup>1</sup> , Emma Hodson-Tole <sup>1</sup> , Gladys Onambele-Pearson <sup>1</sup>	<sup>1</sup> Manchester Metropolitan University, <sup>2</sup> Manchester Clinical Neuroscience Centre, <sup>3</sup> Salford Royal NHS Foundation Trust
24688	P1-B-9 - UMUD: A Web Application for Easy Access to Musculoskeletal Ultrasonography Datasets	Paul Ritsche <sup>1</sup> , Fabio Sarto <sup>2</sup> , Francesco Santini <sup>1</sup> , Christoph Leitner <sup>3</sup> , Martino Franchi <sup>2</sup> , Oliver Faude <sup>1</sup> , Taija Finni <sup>4</sup> , Olivier Seynnes <sup>5</sup> , Neil Cronin <sup>4</sup>	<sup>1</sup> University of Basel, <sup>2</sup> University of Padova, <sup>3</sup> ETH Zurich, <sup>4</sup> University of Jyväskylä, <sup>5</sup> Norwegian School of Sport Sciences
27908	P1-C-10 - Effect of body orientation on muscle co-contraction in individuals with lower limb amputation.	Irene Di Giulio <sup>1</sup> , Salma Errahmouni Barkam <sup>1, 2</sup> , Martin Feelisch <sup>3</sup> , Mike Miller-Smith <sup>4</sup> , Ross Pollock <sup>1</sup> , Livia Visai <sup>5, 6</sup> , Gabriele Armbrecht <sup>7</sup> , Stephen Harridge <sup>1</sup>	<sup>1</sup> King's College London, <sup>2</sup> King's College London and Universitat de Lleida, <sup>3</sup> University of Southampton, <sup>4</sup> Aerobility, <sup>5</sup> University of Pavia and Istituti Clinici Scientifici Maugeri IRCCS, <sup>6</sup> University of Pavia, <sup>7</sup> Charité – Universitätsmedizin Berlin
22026	P1-C-11 - Age-related Adaptations in Acceleration and Deceleration Control during Gait	Naoto Hida <sup>1</sup> , Tomoya Kokue <sup>1</sup> , Kenichi Sugawara <sup>1</sup>	<sup>1</sup> Kanagawa University of Human Services
22429	P1-C-12 - Can vertical ground reaction forces be used as a surrogate to monitor knee joint loading during gait when recovering from a knee injury?	Jere Lavikainen <sup>1</sup> , Lauri Stenroth <sup>1</sup>	<sup>1</sup> University of Eastern Finland
22485	P1-C-13 - Impairments in anticipatory postural adjustments and segmental stabilization strategies in patients undergoing total hip arthroplasty	Roberto Gatti <sup>1,2</sup> , Alessia Bertola <sup>2</sup> , Davide De Leo <sup>2</sup> , Francesco Scandelli <sup>2</sup> , Sean Conrad Stringara <sup>2</sup> , Simone Illuminati <sup>2</sup> , Paola Adamo <sup>2</sup> , Federico Temporiti <sup>3</sup>	<sup>1</sup> Humanitas Clinical and Research Center ; Humanitas University, <sup>2</sup> IRCCS Humanitas Research Hospital, Rozzano, Milan, Italy, <sup>3</sup> Humanitas University



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22505	P1-C-14 - Muscular load, exertion, and usability of an ergonomic versus conventional laparoscopic device. A simulation box experiment	Karen Søgaaard <sup>1</sup> , Henrik Baare Olsen <sup>1</sup> , Tina Dalager <sup>1</sup>	<sup>1</sup> University of Southern Denmark
24687	P1-C-15 - Single motion capture marker is enough for estimating knee joint moments for real-time applications	Minna Rantanen <sup>1</sup> , Ellen Hellman <sup>1</sup> , Rami Korhonen <sup>1</sup> , Jari Arokoski <sup>2</sup> , Jere Lavikainen <sup>1</sup> , Lauri Stenroth <sup>1</sup>	<sup>1</sup> University of Eastern Finland, <sup>2</sup> Helsinki University Hospital
25338	P1-D-17 - Task Dependent Modulation of Neural Drive in the Deltoid: High Density EMG Mapping Reveals Flexible Corticomotor Organisation	Giacomo Nardese <sup>1</sup> , Yuyao Ma <sup>2</sup> , Wolbert Van Den Hoorn <sup>1,2</sup> , Graham Kerr <sup>1</sup> , Paul Hodges <sup>2</sup>	<sup>1</sup> Queensland University of Technology, <sup>2</sup> The University of Queensland
25362	P1-D-18 - Mapping of cortical and corticospinal reactivity along the motor cortex studied by TMS-EMG-EEG	Macey Higdon <sup>1</sup> , Joel Rouste <sup>1</sup> , Martin Häggblom <sup>1</sup> , Tuomas Mutanen <sup>1</sup> , Vadim V. Nikulin <sup>2</sup> , Elena Ukharova <sup>1</sup> , Selja Vaalto <sup>3</sup> , Risto Ilmoniemi <sup>1</sup> , Pantelis Lioumus <sup>1</sup> , Hanna Renvall <sup>1,4</sup> , Maria Nazarova <sup>1</sup>	<sup>1</sup> Aalto University, <sup>2</sup> Max Planck Institute for Human Cognitive and Brain Sciences, <sup>3</sup> Helsinki University Hospital, <sup>4</sup> Aalto University and Helsinki University Hospital
27919	P1-E-19 - GABAB-mediated Inhibition in Plantarflexors is Related to Walking Function in Low-functioning Stroke Survivors	Ilona Ruotsalainen <sup>1</sup> , Theresa Mcguirk <sup>2</sup> , Elliott Perry <sup>2</sup> ,Carolynn Patten <sup>3</sup>	<sup>1</sup> VTT Technical Research Centre of Finland, <sup>2</sup> Biomechanics, Rehabilitation, and Integrative Neuroscience (BRaIN) Lab, UC Davis School of Medicine, <sup>3</sup> University of California, Davis
22427	P1-E-21 - Detecting motor unit loss and remodelling in lumbo-sacral radiculopathy using the EMG filling analysis	Javier Rodriguez-Falces <sup>1</sup> , Armando Malanda <sup>1</sup> , Javier Navallas <sup>1</sup> , Cristina Mariscal Aguilar <sup>2</sup> , Silvia Recalde-Villamayor <sup>1</sup>	<sup>1</sup> Public University of Navarra, <sup>2</sup> University Hospital of Navarra
22477	P1-E-22 - Passive leg movements immediately reduce crying and EMG activity in human neonates	Samuel Mathieu <sup>1</sup> , Arthur Dewolf <sup>2</sup> , Sina Salehpour <sup>2</sup> , Yury Ivanenko <sup>3</sup> , Francesco Lacquaniti <sup>4</sup>	<sup>1</sup> Laboratory of physiology and biomechanics of human locomotion, IoNs, UCLouvain, Belgium, <sup>2</sup> Laboratory of Physiology and Biomechanics of Human Locomotion, IoNs, UCLouvain, Belgium, <sup>3</sup> IRCCS Fondazione Santa Lucia, <sup>4</sup>



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			Laboratory of Neuromotor Physiology, IRCCS Santa Lucia Foundation, Roma, Italy
24622	P1-E-23 - Reliability of Spatiotemporal Neuromuscular Activity Patterns in Magnetomyography Across Force Levels	Haodi Yang <sup>1</sup>	<sup>1</sup> University of Tübingen
28015	P1-F-24 - Effect of electrical stimulation on limb edema: a scoping review	David Selkowitz <sup>1</sup> , Rebekah Goodfellow <sup>1</sup> , Elijah Harris <sup>1</sup> , Arvind Geer <sup>1</sup> , L. Patrick Lynott <sup>1</sup> , Jessica Bell <sup>1</sup>	<sup>1</sup> MGH Institute of Health Professions
22407	P1-F-25 - Beyond Power Grasp: Dexterous and Proportional Multi-Gesture Control of an FES System using sEMG and a Machine Learning Cascade	Yannick Finck <sup>1</sup> , Laura Michnick <sup>1</sup> , Dominik Braun <sup>2</sup> , Michael März <sup>1</sup> , Charlotte Rohleder <sup>1</sup> , Vlad Cnejevici <sup>1</sup> , Alessandro Del Vecchio <sup>2,3</sup>	<sup>1</sup> Friedrich-Alexander-University Erlangen-Nürnberg, <sup>2</sup> Friedrich-Alexander Universität, Erlangen-Nürnberg, <sup>3</sup> Friedrich-Alexander Universität; Erlangen-Nürnberg
27926	P1-G-26 - The influence of fatigue on the vestibular control of balance	Hailey Tutt <sup>1, 2</sup> , Mathew Debenham <sup>3</sup> , Hiya Mahal <sup>1</sup> , Jon Kramer <sup>1</sup> , Chris Mcneil <sup>4</sup> , Brian Dalton <sup>1, 4</sup>	<sup>1</sup> The University of British Columbia, Okanagan, <sup>2</sup> The University of British Columbia, Okanagan campus, <sup>3</sup> The University of British Columbia, <sup>4</sup> University of British Columbia, Okanagan
22487	P1-G-27 - Maintaining Performance Under Fatigue Through Task-Specific Training	Mahsa Rahmani <sup>1</sup> , Frederique Dupuis <sup>2,3</sup> , Jean-Sebastien Roy <sup>1</sup>	<sup>1</sup> Université Laval, <sup>2</sup> University of California in San Diego, <sup>3</sup> UC San Diego
22544	P1-G-28 - Effects of changes in running characteristics and muscle activity on running speed during a 400-m sprint	Wako Kajiwara <sup>1</sup> , Shunya Uda <sup>1</sup> , Fumina Eguchi <sup>1</sup> , Takato Okada <sup>1</sup> , Ryoji Horimoto <sup>1</sup> , Hiroshi Nakano <sup>2</sup> , Masaki Takeda <sup>1</sup>	<sup>1</sup> Doshisha University, <sup>2</sup> Doshisha Univeristy
22551	P1-G-29 - Physiological determinants of electromyographic thresholds during multistage incremental cycling exercise	Sakura Tachibana <sup>1</sup> , Hiroshi Nakano <sup>1</sup> , Wako Kajiwara <sup>1</sup> , Ryoji Horimoto <sup>1</sup> , Takato Okada <sup>1</sup> , Shunya Uda <sup>1</sup> , Kaho Murase <sup>1</sup> , Masaki Takeda <sup>1</sup>	<sup>1</sup> Doshisha University



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23375	P1-G-30 - A model based approach to predicting early fatigue during neuromuscular electrical stimulation	Aron Teklemariam <sup>1</sup> , William Holderbaum <sup>1</sup> , Alex Ireland <sup>1</sup> , Robert Rockenfeller <sup>2</sup> , Emma Hodson-Tole <sup>1</sup>	<sup>1</sup> Manchester Metropolitan University, <sup>2</sup> University of Koblenx
27923	P1-H-31 - Backpropagating Through the Spinal Cord: Towards Inverse Motor Unit Modeling via Differentiable Simulation	Salome Pirozmanishvili <sup>1</sup> , Alessandro Del Vecchio <sup>2, 3</sup> , Irina Gotsiridze <sup>1</sup> , Raul Simpetru <sup>2, 3</sup>	<sup>1</sup> Georgian Technical University, <sup>2</sup> Friedrich-Alexander Universität; Erlangen-Nürnberg, <sup>3</sup> Friedrich-Alexander Universität, Erlangen-Nürnberg
25358	P1-H-32 - MUnitQuest: A community-driven competition on motor unit identification	Thomas Klotz <sup>1</sup> , Pranav Mamidanna <sup>2</sup> , Robin Rohlén <sup>2</sup> , Dario Farina <sup>3</sup> , Oliver Röhrle <sup>1</sup>	<sup>1</sup> University of Stuttgart, <sup>2</sup> Imperial College London, <sup>3</sup> Imperial College
25394	P1-H-33 - Computational Simulation Using HD sEMG features for Quadriceps Arthrogenic Muscle Inhibition: Preliminary Results	Cristian Paris <sup>1</sup> , Klaus Samson <sup>2</sup> , Roberto Yañez <sup>2</sup> , Rony Silvestre <sup>2</sup>	<sup>1</sup> Universidad Adolfo Ibáñez, <sup>2</sup> Clínica MEDS
27931	P1-I-34 - From consensus to translation: The CEDE initiative and development of an interactive decision-support tool for EMG methodological decision-making	Manuela Besomi <sup>1</sup> , Paul Hodges <sup>1</sup>	<sup>1</sup> The University of Queensland
28018	P1-I-35 - How does motor preparation affect finger flexor motoneurons state prior to ballistic contractions?	Rachel Borne <sup>1</sup> , Francois Hug <sup>2</sup> , Simon Avrillon <sup>1</sup>	<sup>1</sup> Nantes Université, <sup>2</sup> Université Côte d'Azur
28021	P1-I-36 - Preparing for a career change: how can postural muscles be retrained to act as joysticks?	Giovanni Traetta <sup>1</sup> , Thomas Cattagni <sup>2</sup> , Francois Hug <sup>3</sup> , Simon Avrillon <sup>1</sup>	<sup>1</sup> Nantes Université, <sup>2</sup> Nantes University, <sup>3</sup> Université Côte d'Azur
21766	P1-I-37 - Sensory Integration with Modulated Vision in Virtual Reality	Satsuki Yamauchi <sup>1</sup> , Matti Itkonen <sup>2</sup> , Shingo Shimoda <sup>1</sup> , Hitoshi Hirata <sup>3</sup>	<sup>1</sup> Nagoya university, <sup>2</sup> University of Eastern Finland, <sup>3</sup> Nagoya University
21965	P1-I-38 - Timing-dependent inhibitory modulation of the primary motor cortex by	Tomoya Kokue <sup>1</sup> , Ryoki Sasaki <sup>1</sup> , Kenichi Sugawara <sup>1</sup>	<sup>1</sup> Kanagawa University of Human Services



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	short-latency afferent inhibition: insight from a transcranial magnetic stimulation–electroencephalography study		
22293	P1-I-39 - Vibration-induced Modulation of Spinal and Cerebellar Activity Following Motor Skill Acquisition	Hailey Tabbert <sup>1</sup> , Tanya Najib <sup>1</sup> , Paul Yelder <sup>1,2</sup> , Bernadette Murphy <sup>1,2</sup>	<sup>1</sup> Ontario Tech University, <sup>2</sup> Ontario Tech Univeristy
22483	P1-I-40 - Title: Experience-dependent tuning of spinal and transcortical stretch reflexes supports goal-directed movement	Taiyeba Akter <sup>1</sup>	<sup>1</sup> Umeå University
24678	P1-I-41 - Effects of preparatory cues on brain functional connectivity during the response preparation period in a Go/NoGo task	Yuya Matsuda <sup>1</sup> , Rin Kosuge <sup>1</sup> , Koki Iwata <sup>1</sup> , Hidekazu Saito <sup>1</sup> , Eriko Shibata <sup>2</sup> , Takeshi Sasaki <sup>1</sup> , Kazuhiro Sugawara <sup>1</sup>	<sup>1</sup> Sapporo Medical University, <sup>2</sup> Hokkaido Bunkyo University
24782	P1-I-42 - Increased muscular coactivation for the assessment of motor control under non-optimal conditions	Elisa Romero Avila <sup>1</sup> , Sybele Williams <sup>1</sup> , Maximilian Siebert <sup>1</sup> , Catherine Disselhorst-Klug <sup>1</sup>	<sup>1</sup> RWTH Aachen University
24784	P1-I-43 - Disentangling and recognizing superimposed motor intentions for movement augmentation	Tianyu Jia <sup>1</sup> , Ciaran Mcgeady <sup>1</sup> , Yifeng Li <sup>1</sup> , Yunjia Li <sup>1</sup> , Dario Farina <sup>1</sup>	<sup>1</sup> Imperial College London
25232	P1-I-44 - A Wrist Exoskeleton for Motor Control Studies	Lara Vila <sup>1</sup> , Dario Farina <sup>1</sup> , Juan Gallego <sup>2</sup>	<sup>1</sup> Imperial College London, <sup>2</sup> Champalimaud Foundation
27906	P1-J-45 - Head tremor's role in the effects of deep-brain stimulation on intention tremor in individuals with essential tremor.	Gjergji Cobani <sup>1</sup> , Gudrun Johansson <sup>2</sup> , Amar Awad <sup>3</sup> , Fredrik Öhberg <sup>1</sup> , Helena Grip <sup>4</sup>	<sup>1</sup> Umeå University, <sup>2</sup> Department of Community Medicine and Rehabilitation, Physiotherapy, Umeå University, Umeå, Sweden, <sup>3</sup> Department of Clinical Science, Neuroscience, Umeå University, Umeå, Sweden, <sup>4</sup> Umeå University Hospital



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22441	P1-J-46 - Automatic characterization of post-stroke motor unit functionality: a novel neural-interfacing paradigm	Marco Carbonaro <sup>1</sup> , Rafael Ornelas Kobayashi <sup>1</sup> , Paravano Michele <sup>1</sup> , Martin Tenniglo <sup>2</sup> , Gerdienke Prange-Lasonder <sup>3</sup> , Irfan Refai <sup>1</sup> , Massimo Sartori <sup>1</sup>	<sup>1</sup> University of Twente, <sup>2</sup> Roessingh, Centre for Rehabilitation, <sup>3</sup> Roessingh Centre for Rehabilitation
28017	P1-K-47 - Comparison of Manual and Established Automatic Motor Unit Tracking Methods Including a Superior Novel Approach	Mette Ibs <sup>1</sup> , Marius OBwald <sup>2</sup> , Alessandro Del Vecchio <sup>1</sup>	<sup>1</sup> Friedrich-Alexander Universität Erlangen-Nürnberg, <sup>2</sup> Friedrich-Alexander-Universität Erlangen-Nürnberg
28022	P1-K-48 - Exploring the influence of foot sole cutaneous stimulation on motor unit behaviour during sustained low-level plantarflexion	Laura Marrelli <sup>1</sup> , Tushar Sharma <sup>1</sup> , Ryan Weller <sup>2</sup> , Jayne Kalmar <sup>2</sup> , Leah Bent <sup>1</sup>	<sup>1</sup> University of Guelph, <sup>2</sup> Wilfrid Laurier University
27933	P1-K-49 - Reliability of MScanFit motor unit number estimation: a literature review	George Russell <sup>1, 2</sup> , Rodrigo Fernandez-Gonzalo <sup>3</sup> , Ricardo Mesquita <sup>3</sup>	<sup>1</sup> SpaceMed, Erasmus Mundus Joint M.Sc. Programme # 101127568; Karolinska Institutet, <sup>2</sup> SpaceMed, Erasmus Mundus Joint M.Sc. Programme # 101127568, <sup>3</sup> Karolinska Institutet
21198	P1-K-50 - Innervation zone detection of the puborectalis muscle using a high-density surface electromyographic vaginal probe	Irina De Alba Alvarez <sup>1</sup> , Anique Bellos-Grob <sup>1</sup> , Antonio De Jesus Gogeochea Hernandez <sup>2</sup>	<sup>1</sup> University of Twente, <sup>2</sup> Universiteit Twente
21879	P1-K-51 - Contraction intensity-dependent modulation of motor unit behaviour during rapid contractions	Haydn Thomason <sup>1</sup> , Jakob Škarabot <sup>1</sup> , Jonathan P Folland <sup>1</sup>	<sup>1</sup> Loughborough University
22377	P1-K-52 - Influence of Maximal Eccentric Contractions with the Knee Flexors on Voluntary Torque and Motor Unit Activity	Chrystostomos Sahinis <sup>1,2</sup> , Ioannis Amiridis <sup>3</sup> , Roger Enoka <sup>4</sup> , Eleftherios Kellis <sup>2</sup>	<sup>1</sup> Aristotle University of Thessaloniki, <sup>2</sup> Laboratory of Neuromechanics, Department of Physical Education and Sport Science at Serres, Aristotl, <sup>3</sup> 1Laboratory of Neuromechanics, Department of Physical Education and Sport Science at Serres, Aristot, <sup>4</sup> University of Colorado Boulder



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22404	P1-K-53 - Differences in shared neural drive between small and large motor units in the soleus and gastrocnemius medialis	Zhihao Duan <sup>1</sup> , Ruoli Wang <sup>1,2</sup>	<sup>1</sup> KTH Royal Institute of Technology, <sup>2</sup> Royal Institute of Technology
22481	P1-K-54 - Muscle-specific modulation of motor unit behavior across the menstrual cycle in healthy young females: Influence of ovarian hormones on neural drive	Yuichi Nishikawa <sup>1</sup> , Kohei Watanabe <sup>2</sup> , Allison Hyngstrom <sup>3</sup>	<sup>1</sup> Kanazawa University, <sup>2</sup> Chukyo University, <sup>3</sup> Marquette University
22484	P1-K-55 - Feature-Based Channel Selection for improving Motor Unit Yield in HDsEMG Decomposition	Saroj Bista <sup>1</sup>	<sup>1</sup> Trinity College Dublin
22526	P1-K-56 - Motor unit firing behavior during repeated isotonic contractions of the first dorsal interosseous	Keifer Bass <sup>1</sup> , Trent Herda <sup>1</sup> , Andrew Veith <sup>1</sup>	<sup>1</sup> University of Kansas
23263	P1-K-57 - Muscle and motoneuron synergies in biomimetic and non-biomimetic 3-DoF control tasks	Johanna Happold <sup>1,2</sup> , Laura Ferrante <sup>3</sup> , Patricia Capsi Morales <sup>1</sup> , Deren Y. Barsakcioglu <sup>3</sup> , Dario Farina <sup>3</sup> , Cristina Piazza <sup>1</sup>	<sup>1</sup> Technical University of Munich, <sup>2</sup> Technical University of Munich (TUM), <sup>3</sup> Imperial College London
24436	P1-K-58 - HD-MUNet: integrating artificial intelligence and high-density electromyography for motor unit number estimation	Marco Gagliardi <sup>1</sup> , Andres Ortiz <sup>1</sup> , Taian Martins <sup>1</sup>	<sup>1</sup> Politecnico di Torino
24557	P1-K-59 - Motor unit control strategies during submaximal isometric knee extensions in sprinters	Sara Faggian <sup>1</sup> , Giuseppe Marcolin <sup>2</sup> , Samira Breban <sup>3</sup> , Myriam Lubrano <sup>4</sup> , Marta Ronconi <sup>5</sup> , Andrea Cutti <sup>6</sup> , Nicola Petrone <sup>3</sup> , Andrea Casolo <sup>2</sup>	<sup>1</sup> University of Padova, <sup>2</sup> Department of Biomedical Sciences, University of Padova, Padova, Italy, <sup>3</sup> Department of Industrial Engineering, University of Padova, Padova, Italy, <sup>4</sup> Department of Electrical, Electronic, and Information Engineering Guglielmo Marconi, Bologna, Italy, <sup>5</sup> School of Human Movement Sciences, University of Padova, Padova,



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			Italy, <sup>6</sup> Centro Protesi INAIL, Via Rabuina 14, 40054 Vigorso, Italy
24682	P1-K-60 - Effects of local mechanical vibration on MU discharge behavior during isometric knee extension	Corrado Cescon <sup>1</sup> , Marco Barbero <sup>1</sup> , Alessandro Schneebeli <sup>1</sup> , Stefano Vercelli <sup>1,2</sup>	<sup>1</sup> University of Applied Sciences and Arts of Southern Switzerland, <sup>2</sup> Rehabilitation Research Laboratory 2rLab, DEASS, SUPSI, Switzerland
24690	P1-K-61 - Effects of contraction type at similar relative intensities on vastus lateralis activation assessed using high-density electromyography	Anderson Oliveira <sup>1</sup> , Ricardo P. Schiochet <sup>2</sup> , Leonardo M. Silva <sup>2</sup> , Guilherme R. Silva <sup>2</sup> , Fabrizio Caputo <sup>2</sup> , Francesco Negro <sup>3</sup>	<sup>1</sup> Aalborg University, <sup>2</sup> UDESC - Brazil, <sup>3</sup> Università degli Studi di Brescia
24772	P1-K-62 - Is delta F associated with muscle mechanics?	Giovanni Traetta <sup>1,2</sup> , Marco Draghero <sup>3</sup> , Maria Clara Brandão <sup>4,5</sup> , Roger De Mello <sup>5</sup> , Liliam Oliveira <sup>5</sup> , Taian Martins <sup>3</sup>	<sup>1</sup> Nantes Université, <sup>2</sup> Université de Nantes et Université du Maine, <sup>3</sup> Politecnico di Torino, <sup>4</sup> Universidade Federal do Rio de Janeiro, <sup>5</sup> Federal University of Rio de Janeiro
24786	P1-K-63 - Motoneurons rate coding and synaptic input changes in post-stroke paresis	Valentin Goreau <sup>1</sup> , Raphaël Gross <sup>1</sup> , Guillaume Le Sant <sup>1</sup> , Francois Hug <sup>2</sup> , Thomas Cattagni <sup>3</sup>	<sup>1</sup> Nantes Université, <sup>2</sup> Université Côte d'Azur, <sup>3</sup> Nantes University
24796	P1-K-64 - Effects of Upper-Limb Exoskeleton Assistance on Motor Unit Discharge During External Load Holding	Giacomo Valli <sup>1</sup> , Martina Mosso <sup>2</sup> , Maria Lucia Cavallo <sup>3</sup> , Alessandro Piol <sup>2</sup> , Emilia Scalone <sup>4</sup> , Tiwana Varrecchia <sup>5</sup> , Giorgia Chini <sup>5</sup> , Alberto Ranavolo <sup>5</sup> , Luca Falciati <sup>3</sup> , Debora Brignani <sup>3</sup> , Nicola Francesco Lopomo <sup>6</sup> , Francesco Negro <sup>1</sup>	<sup>1</sup> Università degli Studi di Brescia, <sup>2</sup> Department of Information Engineering, Università degli Studi di Brescia, Brescia, Italy, <sup>3</sup> Department of Clinical and Experimental Sciences, Università degli Studi di Brescia, Brescia, Italy, <sup>4</sup> Centro Protesi Inail, Vigorso di Budrio, Italy, <sup>5</sup> DiMEILA, INAIL, Monte Porzio Catone, Italy, <sup>6</sup> Department of Design, Politecnico di Milano, Milan, Italy
27932	P1-L-65 - The effect of explicit instructions on muscle synergy analysis	Elisa Maria Fiorino <sup>1</sup> , Silvia Conforto <sup>2,3</sup> , Maurizio Schmid <sup>1</sup> , Simone Ranaldi <sup>4</sup>	<sup>1</sup> Roma Tre University, <sup>2</sup> Department of Industrial, Electronic and Mechanical Engineering, Roma Tre University, <sup>3</sup> Roma Tre University, <sup>4</sup> University Roma TRE
22382	P1-L-66 - Electromyographic study of facial and masticatory muscles in adult women	Reinaldo Brunello Junior <sup>1</sup>	<sup>1</sup> Universidade of Sao Paulo- USP



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	undergoing midface lifting through suprapariosteal hyaluronic acid application in the zygomatic arch.		
22408	P1-L-67 - Influence of EMG configuration on muscle synergies during isometric single-finger isometric flexion	Lorenzo De Bei <sup>1</sup> , Zhihao Duan <sup>1</sup> , Paul-Peter Arslan <sup>2,3</sup> , Pålvel Lindberg <sup>2,3</sup> , Jeanette Plantin <sup>4</sup> , Ruoli Wang <sup>1,5</sup>	<sup>1</sup> KTH Royal Institute of Technology, <sup>2</sup> Université Paris Cité, Institute of Psychiatry and Neuroscience of Paris (IPNP), INSERM U1266, Paris, <sup>3</sup> Université Paris Cité, <sup>4</sup> Karolinska Institutet, <sup>5</sup> Royal Institute of Technology
25406	P1-L-68 - Wearable multi-channel electromyography garment for automatic synergy-based identification and assessment of ankle muscles activity	Rafael Ornelas Kobayashi <sup>1</sup> , Edwin Van Asseldonk <sup>1</sup> , Massimo Sartori <sup>1</sup>	<sup>1</sup> University of Twente
22478	P1-L-69 - Muscle synergies analysis as a tool to investigate postural control during ballistic upper limb movements	Francesco Scandelli <sup>1</sup> , Valentina Lanzani <sup>2</sup> , Federico Temporiti <sup>3</sup> , Francesca Cappelletti <sup>1</sup> , Emanuele Vitobello <sup>4</sup> , Luca Canova <sup>1</sup> , Paola Adamo <sup>1</sup> , Alessandro Scano <sup>2</sup> , Roberto Gatti <sup>1,5</sup>	<sup>1</sup> IRCCS Humanitas Research Hospital, Rozzano, Milan, Italy, <sup>2</sup> STIIMA, Italian National Council Research (CNR), Milan, Italy, <sup>3</sup> Humanitas University, <sup>4</sup> IRCCS Humanitas Research Hospital, <sup>5</sup> Humanitas Clinical and Research Center ; Humanitas University
27928	P1-M-70 - Off and on, then on again: how does preloading influence cutaneous encoding of changes in load at the foot sole	Luke Cleland <sup>1</sup> , Ashley Vanderhaeghe <sup>1</sup> , Leah Bent <sup>1</sup>	<sup>1</sup> University of Guelph
27897	P1-M-71 - STRUCTURAL PROFILE OF VASTUS LATERALIS AT ONE MONTH OF ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	Rony Silvestre <sup>1</sup> , Joan Cadefau <sup>2</sup> , Josep María Padullés <sup>2</sup> , Cristián Paris <sup>3</sup> , Roberto Yañez <sup>4</sup> , Klaus Samson <sup>5</sup>	<sup>1</sup> Innovation Centre, MEDs, Santiago, Chile., <sup>2</sup> INFEC, Universidad de Barcelona, Santiago, Spain., <sup>3</sup> Universidad Adolfo Ibáñez, <sup>4</sup> Traumatology, MEDs, Santiago, Chile., <sup>5</sup> NOXIS Centre, MEDs, Santiago, Chile.
27920	P1-M-72 - The effect of simulated building sway on upper trapezius EMG during computer tasks: a pilot study	Joanna Reeves <sup>1</sup> , Ian Walker <sup>1</sup> , Vanshika Sharma <sup>2</sup> , Antony Darby <sup>2</sup> , Alex Pavic <sup>3</sup> , Jennifer Davies <sup>4</sup>	<sup>1</sup> Swansea University, <sup>2</sup> University of Bath, <sup>3</sup> University of Exeter, <sup>4</sup> Cardiff University



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21762	P1-M-73 - Responses evoked by ambiguous tactile feedback when standing at a virtual height.	John Misiasek <sup>1</sup> , Lukian Poditsky <sup>2</sup> , Juan Forero <sup>3</sup>	<sup>1</sup> University of Alberta, <sup>2</sup> Neuroscience and Mental Health Institute, University of Alberta, <sup>3</sup> Glenrose Rehabilitation Hospital
22442	P1-M-74 - Neuromechanical Adaptations in Walking and Running Gait One Year After Achilles Tendon Rupture	Kari Huseth <sup>1</sup>	<sup>1</sup> University of Gothenburg
22521	P1-M-75 - Selective involuntary pelvic floor activation evoked by passive whole-body motion	Xueqing Zhou <sup>1</sup> , Alison Williams <sup>1</sup> , Jiho Song <sup>1</sup> , Jeff Nickel <sup>1</sup> , Jean-Sébastien Blouin <sup>1</sup> , Tania Lam <sup>1</sup>	<sup>1</sup> University of British Columbia
24042	P1-M-76 - Neuromuscular control in individuals with chronic ankle instability: insights from EMG entropy and muscle fiber conduction velocity	Milena Bürgel Murari <sup>1</sup> , Lucas Fernandes <sup>1</sup> , Maria Isabel Orselli <sup>2</sup> , Grazielle Rodrigues Da Silva <sup>3</sup> , Guilherme Sartorelli <sup>1</sup> , Letícia Böttcher <sup>1</sup> , Eneida Suda <sup>4</sup> , Isabel Sacco <sup>5,6</sup>	<sup>1</sup> Universidade de São Paulo (USP), <sup>2</sup> Israeli College of Health Sciences Albert Einstein, São Paulo, Brazil, <sup>3</sup> Israeli College of Health Sciences Albert Einstein, São Paulo, Brazil., <sup>4</sup> Universidade Cidade de São Paulo, <sup>5</sup> Sandra de Camargo Neves Sacco, <sup>6</sup> University of São Paulo (USP)
24286	P1-M-77 - Assessment of novel placement guidelines (EPICA) for triceps surae electromyography electrodes	Jeroen Aeles <sup>1</sup> , Liese Bosman <sup>1,2</sup> , Daan De Vlieger <sup>1,3</sup> , Nele Terlaeken <sup>1,2</sup> , Manuela Besomi <sup>4</sup> , Eva Swinnen <sup>1,3</sup>	<sup>1</sup> Vrije Universiteit Brussel, <sup>2</sup> Movement and Nutrition for Health and Performance, Vrije Universiteit Brussel, <sup>3</sup> Rehabilitation Research Group, Vrije Universiteit Brussel, <sup>4</sup> The University of Queensland
24573	P1-M-78 - Recruitment strategies of the triceps surae muscles during isometric plantarflexion contractions	Timothy Green <sup>1</sup> , Usha Kuruganti <sup>2</sup>	<sup>1</sup> University of Western Ontario, <sup>2</sup> University of New Brunswick
27930	P1-N-79 - Quantifying the micrometre-scale motor unit displacements in human skeletal muscle using ultrafast ultrasound	Simone Ruiter <sup>1</sup> , Robin Rohlén <sup>2</sup> , Christer Grönlund <sup>1</sup>	<sup>1</sup> Umeå University, <sup>2</sup> Imperial College London
22527	P1-N-80 - Automated classification of neuromuscular disease from ultrasound	Chuin Hong Yap <sup>1</sup> , Adrian Davison <sup>1</sup> , Nina Mitic <sup>1</sup> , Chloe Boden-Moore <sup>1</sup> , Moi Hoon	<sup>1</sup> Manchester Metropolitan University, <sup>2</sup> Manchester Clinical Neuroscience Centre, <sup>3</sup> Salford Royal NHS Foundation Trust



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	imaging using fasciculation detection and vision transformers	Yap <sup>1</sup> , Amina Chaouch <sup>2,3</sup> , Emma Hodson-Tole <sup>1</sup>	
24674	P1-N-81 - A SQUID biomagnetic measurement system for magnetoneurography and magnetomyography aiming clinical applications	Yoshiaki Adachi <sup>1</sup>	<sup>1</sup> Kanazawa Institute of Technology
23102	P1-O-82 - Pain Perception and Habituation During Electromyostimulation: Relation to Muscle Fatigue	Katja Uhrhan <sup>1</sup> , Hartmut Witte <sup>1,2</sup>	<sup>1</sup> Technische Universität Ilmenau, <sup>2</sup> Technische Universität Ilmenau
24627	P1-O-83 - Do Individuals with Fibromyalgia Show Significant Changes in Muscle Activity? A Pilot Study	Michele Guillard <sup>1</sup> , Beatriz Loscher <sup>1</sup> , Jady Verissimo <sup>1</sup> , Isabel Sacco <sup>2</sup> , Eneida Suda <sup>1</sup>	<sup>1</sup> Universidade Cidade de São Paulo, <sup>2</sup> University of São Paulo
24774	P1-O-84 - Does localized vastus medialis soreness induce vastus-specific neuromuscular adaptations during gait?	Valter Devecchi <sup>1</sup> , Deborah Falla <sup>1</sup> , Alessio Gallina <sup>1</sup>	<sup>1</sup> University of Birmingham
25415	P1-O-85 - Movement evoked pain responses to progressive resistance versus circuit training in adolescent cancer survivors: results from a multicentre randomised controlled trial	Mathias Kristiansen <sup>1</sup> , Henrik Riel <sup>2</sup> , Birgitte Klug Albertsen <sup>3</sup> , Martin Kaj Fridh <sup>4</sup> , Christina Friis Jensen <sup>5</sup> , Hanne Bækgaard Larsen <sup>4</sup> , Mathias Rathe <sup>6</sup> , Stine Svilshave <sup>6</sup> , Ruta Tuckuviene <sup>7</sup> , Clara Vad <sup>8</sup> , Joachim Wiskemann <sup>9</sup> , Pascal Madeleine <sup>2</sup>	<sup>1</sup> Aalborg University, <sup>2</sup> Department of Health Science and Technology, Faculty of Medicine, Aalborg University, Denmark, <sup>3</sup> Department of Paediatrics and Adolescent Medicine, Aarhus University Hospital, Denmark, <sup>4</sup> Department of Pediatrics and Adolescent Medicine, University Hospital Copenhagen, Denmark, <sup>5</sup> Department of Clinical Research, Faculty of Health Sciences, Aalborg University, Denmark, <sup>6</sup> Department of Pediatric Hematology and Oncology, Odense University Hospital, Denmark, <sup>7</sup> Department of Pediatrics and Adolescent Medicine, Rigshospitalet, Copenhagen, Denmark, <sup>8</sup> Department of Pediatric Hematology and Oncology, Aalborg University



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			Hospital, Denmark, <sup>9</sup> Department of Medical Oncology, Working Group Exercise Oncology, Heidelberg, Germany
22528	P1-P-86 - Effects of delayed visual feedback on pusher behavior in a wheelchair setting: A single-subject repeated-measures experiment	Yuichi Kato <sup>1</sup> , Yumi Ikeda <sup>2,3</sup> , Kazu Amimoto <sup>4</sup>	<sup>1</sup> Moriyama Neurological Center Hospital, <sup>2</sup> Faculty of Health Sciences, Tokyo Metropolitan University, <sup>3</sup> Tokyo Metropolitan University, <sup>4</sup> Sendai Seiyō Gakuin University
22542	P1-P-87 - Associations between spasticity, proprioception and movement post-stroke	Jasmine Usher <sup>1</sup> , Jacqui Morris <sup>1</sup> , Gavin Wylie <sup>1</sup> , Alejandra Aranceta-Garza <sup>1</sup>	<sup>1</sup> University of Dundee
24282	P1-P-88 - Altered shank muscle activation during single-leg hopping after Achilles tendon injury: Increased contribution of Biarticular muscles	Guðni Rafn Harðarson <sup>1</sup> , Jón Karlsson <sup>2</sup> , Kari Huseth <sup>3</sup> , Katarina Nilsson Helander <sup>1</sup> , Annelie Brorsson <sup>1</sup> , Roy Tranberg <sup>2</sup> , Per Aagaard <sup>4</sup>	<sup>1</sup> Gothenburg University, <sup>2</sup> Sahlgrenska Akademin, <sup>3</sup> University of Gothenburg, <sup>4</sup> University of Southern Denmark
24805	P1-P-89 - Exploring Spatial High-Density EMG Features of Upper Arm Muscles to Inform Myoelectric Prosthesis Control	Usha Kuruganti <sup>1</sup> , Timothy Green <sup>2</sup> , Brett Speedy <sup>1</sup>	<sup>1</sup> University of New Brunswick, <sup>2</sup> University of Western Ontario
24826	P1-P-90 - Investigating the reliability and the effect of age on surface EMG-based features during three swallow assessments in healthy adults	Afua Boakyewaah Appiah <sup>1</sup> , Emer Doheny <sup>1</sup>	<sup>1</sup> University College Dublin
24960	P1-P-91 - Manipulation of visual proprioception with Virtual Reality for the treatment of pathological tremor	Alejandro Pascual Valdunciel <sup>1</sup> , Marcos Sacristán <sup>2</sup> , Juan Marín-Lahoz <sup>1</sup> , Jaime Ibañez <sup>1</sup> , Daniel Martín <sup>1</sup>	<sup>1</sup> University of Zaragoza, <sup>2</sup> Universidad de Zaragoza
24980	P1-P-92 - Correlation between Hip Musculature EMG and Goniometric and Force Measures in Persons with Patellofemoral Pain	David Selkowitz <sup>1</sup> , David Salazar, Li <sup>2</sup> , James Oh <sup>1</sup> , Kaley Swintak <sup>3</sup> , Rani Patel <sup>3</sup> , George Beneck <sup>4</sup>	<sup>1</sup> MGH Institute of Health Professions, <sup>2</sup> University of Pittsburgh Medical Center, <sup>3</sup> Brigham & Women's Hospital, Boston, MA, <sup>4</sup> California State University, Long Beach



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25139	P1-P-93 - Muscle-specific differences in activation during a dynamic neck movement task in individuals with neck pain	Hirofumi Sageshima <sup>1</sup> , Ruba Albatayneh <sup>2</sup> , Dagmar Pavlů <sup>1</sup>	<sup>1</sup> Charles University, <sup>2</sup> University of Valencia
25181	P1-P-94 - The effects of high-PAS on corticospinal tract plasticity and motor unit characteristics through high-density surface EMG	Anna Nätkynmäki <sup>1</sup> , Mansour Taleshi <sup>1</sup> , Erika Haaksiluoto <sup>2</sup> , Janne Avela <sup>1</sup> , Ivan Vujaklia <sup>3</sup> , Anastasia Shulga <sup>2</sup>	<sup>1</sup> University of Jyväskylä, <sup>2</sup> BioMag Laboratory, HUS Diagnostic Center, Helsinki Uni Hospital, Uni of Helsinki and Aalto Uni, <sup>3</sup> Aalto University
28019	P1-Q-95 - Robotic Rehabilitation Design for Thumb Circumduction of the Elderly	Hoang Thuc Minh Vo <sup>1</sup> , Chien-Ju Lin <sup>2</sup> , Hsiao-Feng Chieh <sup>2</sup> , Li-Chieh Kuo <sup>3</sup> , Kai-Nan An <sup>4</sup> , Fong-Chin Su <sup>1</sup>	<sup>1</sup> National Cheng Kung University, <sup>2</sup> Medical Device Innovation Center, National Cheng Kung University, Tainan, Taiwan, <sup>3</sup> Department of Occupational Therapy, National Cheng Kung University, Tainan, Taiwan, <sup>4</sup> Department of Orthopedic Surgery, Mayo Clinic, Rochester, U.S
24785	P1-Q-96 - Characterization of the effect of perturbations during cycling using the Haptic Cycling Trainer	Daniel Koskas <sup>1</sup> , Muhammad Ahmed <sup>1</sup> , Murat Sahin <sup>1</sup> , Andrea Ortiz-Cuadros <sup>1</sup> , Dónal Holland <sup>1</sup> , Giacomo Severini <sup>1</sup>	<sup>1</sup> University College Dublin
25400	P1-Q-97 - Upper-Limb Loading and Muscle Activation During the Timed Up and Go Test With UNILEXA Exoskeleton: A Case Series	Robert Pastor <sup>1</sup> , Michal Gloger <sup>1</sup>	<sup>1</sup> MEBSTER
22508	P1-R-98 - Plastic Changes in Corticospinal Recruitment Properties of the Biceps Femoris in Sprinters and the Impact of Hamstring Injury	Ayako Higashihara <sup>1</sup> , Genki Futatsubashi <sup>2</sup>	<sup>1</sup> Keio University, <sup>2</sup> Toyo University
24679	P1-R-99 - Neural entrainment during movement synchronized to music: a steady-state evoked potential study	Rin Kosuge <sup>1</sup> , Sumire Hashimoto <sup>1</sup> , Yuya Matsuda <sup>1</sup> , Koki Iwata <sup>1</sup> , Hidekazu Saito <sup>1</sup> , Eriko Shibata <sup>2</sup> , Takeshi Sasaki <sup>1</sup> , Kazuhiro Sugawara <sup>1</sup>	<sup>1</sup> Sapporo Medical University, <sup>2</sup> Hokkaido Bunkyo University



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25327	P1-R-100 - Kinematics and muscle activation of the lower limb during barefoot and flip-flop running	Chun Wai Wong <sup>1</sup> , Chia-Ming Chang <sup>1</sup> , Ying-Che Tseng <sup>2</sup> , Chih-Wei Chen <sup>2</sup>	<sup>1</sup> China Medical University, Department of Physical Therapy, <sup>2</sup> China Medical University, Department of Biomedical Engineering
25360	P1-R-101 - Changes in EMG frequency-domain power ratios during incremental pedaling exercise	Kengo Wakui <sup>1</sup> , Shuhei Kameyama <sup>2</sup> , Yuki Sato <sup>3</sup> , Yukihiko Ushiyama <sup>1</sup>	<sup>1</sup> Niigata University, <sup>2</sup> Niigata University of management, <sup>3</sup> National Institute of Technology, Oyama College
22476	P1-S-102 - A Textile-Integrated Multi-Pad EMG Bracelet for High-Quality Multi-Gesture Decoding: A Feasibility Study	Nebojsa Malesevic <sup>1</sup> , Vladimir Kojić <sup>2</sup> , Milica Baljic <sup>2</sup> , Matija Strbac <sup>2</sup> , Christian Antfolk <sup>1</sup>	<sup>1</sup> Lund University, <sup>2</sup> Tecnia Serbia
24694	P1-S-103 - Materials for soft electronics	Naveen Tiwari <sup>1</sup>	<sup>1</sup> Tampere University, Finland
24781	P1-S-104 - Single element ultrasound transducers are a viable alternative to imaging probes for the measurement of muscle fascicle length and pennation angle	Tristan Wen Jie Choo <sup>1</sup> , Bruno Grandi Sgambato <sup>1</sup> , Letizia Gionfrida <sup>2</sup> , Mengxing Tang <sup>1</sup> , Dario Farina <sup>1</sup>	<sup>1</sup> Imperial College London, <sup>2</sup> King's College London
25346	P1-S-105 - Influence of Inertial Sensor Placement on Lower-Limb Kinematics During Gait: Implications for Clinical Assessment	Fredrik Öhberg <sup>1</sup> , Paula Urbaneja Fernández <sup>2</sup> , Helena Grip <sup>2</sup>	<sup>1</sup> Umeå University, <sup>2</sup> Dep. of Diagnostics and Intervention, Biomedical engineering and Radiation Physics, Umeå University
25336	P2-A-1 - Six-week home-based neuromuscular electrical stimulation training improves foot and lower-leg muscle strength, physical performance and cardiovascular function in older adults	Ryosuke Takeda <sup>1</sup> , Masahiro Kuniki <sup>1</sup> , Marino Karaki <sup>1,2</sup> , Kaito Igawa <sup>1</sup> , Kazushi Sumura <sup>1</sup> , Kohei Watanabe <sup>1</sup>	<sup>1</sup> Chukyo University, <sup>2</sup> Chukyo university
25349	P2-A-2 - Effects of Whole-Body Neuromuscular Electrical Stimulation on	Riccardo Borzuola <sup>1</sup> , Giovanni Martino <sup>2</sup> , Mohammadhossein Ghasemi <sup>3</sup> , Chiara	<sup>1</sup> Università di Roma "Foro Italico", <sup>2</sup> University of Padova, <sup>3</sup> Department of Biomedical Sciences, University of Padova, <sup>4</sup> University of Rome Foro Italico



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	Neuromuscular Function in Older Adults With and Without Sarcopenia	Fossati <sup>4</sup> , Giuseppe De Vito <sup>2</sup> , Andrea Macaluso <sup>4</sup>	
25388	P2-A-3 - Motor unit behavior in lifelong trained and sedentary older adults: insights from sex-specific analyses	Marta Boccardo <sup>1</sup> , Marco Carbonaro <sup>2</sup> , Clarissa Brusco <sup>3</sup> , Fulvio Lauretani <sup>4</sup> , Julián Alcázar <sup>5</sup> , Martino Franchi <sup>3</sup> , Simone Porcelli <sup>6</sup> , Alberto Botter <sup>1</sup>	<sup>1</sup> Politecnico di Torino, <sup>2</sup> University of Twente, <sup>3</sup> University of Padova, <sup>4</sup> University of Parma, Department of Medicine and Surgery, <sup>5</sup> GENUUD Toledo Research Group, Universidad de Castilla-La Mancha, <sup>6</sup> Department of Molecular Medicine, University of Pavia
25448	P2-A-4 - Effects of very old age on persistent inward currents contribution to motoneuron firing	Vianney Rozand <sup>1</sup> , Cyril Chatain <sup>1</sup> , Rayane Roty <sup>1</sup> , Thomas Cattagni <sup>2</sup> , Raphaël Hamard <sup>1</sup> , Romuald Lepers <sup>1</sup>	<sup>1</sup> Université Bourgogne Europe, <sup>2</sup> Nantes University
25159	P2-B-5 - Towards natural prosthetic control: proportional and simultaneous wrist-hand control from an EMG-driven compact neural network	Jonas Koellner <sup>1</sup> , Bin Yang <sup>1</sup>	<sup>1</sup> University of Stuttgart
25391	P2-B-6 - NEURAL NETWORK APPROACHES FOR ACCURATE AND ROBUST SYNTHETIC EMG EVENT DETECTION IN NEUROREHABILITATION RESEARCH	Cristian Riveros-Matthey <sup>1</sup> , Wolbert Van Den Hoorn <sup>1</sup> , Paul Hodges <sup>1</sup>	<sup>1</sup> The University of Queensland
24742	P2-C-8 - INVESTIGATING THE EFFECT OF TOPICAL MENTHOL AND CAMPHOR ON ANKLE PROPRIOCEPTION	Ashley Vanderhaeghe <sup>1</sup> , Laura Marrelli <sup>1</sup> , Tushar Sharma <sup>1</sup> , Luke Cleland <sup>1</sup> , Leah Bent <sup>1</sup>	<sup>1</sup> University of Guelph
25007	P2-C-9 - The Effects of Age and Speed on Multisegment Foot Kinematics During Gait in Young and Older Adults	Brett Speedy <sup>1,2</sup> , Usha Kuruganti <sup>2</sup>	<sup>1</sup> Andrew and Marjorie McCain Human Performance Laboratory, University of New Brunswick,, <sup>2</sup> University of New Brunswick
25046	P2-C-10 - Validating Tendon Indentation as a Biomechanically Equivalent Alternative to	Aryan Jadhav <sup>1,2</sup> , Sungjin Bae <sup>3</sup> , William Zev Rymer <sup>3</sup>	<sup>1</sup> Indian Institute of Technology (Banaras Hindu University), <sup>2</sup> Indian Institute of Technology (Banaras Hindu University),



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	Joint Rotation for Post-Stroke Stretch Reflex Assessment		India, <sup>3</sup> Shirley Ryan AbilityLab (Northwestern University), Chicago, USA
25252	P2-C-11 - The choice of low-pass filter cutoff frequency affects the interpretation of joint moments in gait	Valtteri Huttunen <sup>1,2</sup> , Juha-Pekka Kulmala <sup>1</sup> , Tom Thiel <sup>3</sup>	<sup>1</sup> HUS, <sup>2</sup> HUS (Helsinki University hospital), <sup>3</sup> Metropolia University of Applied Sciences
25342	P2-C-12 - Analysis of Muscle Activity Characteristics During Underwater Running at Different Speeds Based on Surface Electromyography	Yaqian Qi <sup>1</sup>	<sup>1</sup> Shanghai Research Institution of Sports Science
25378	P2-C-13 - A Biomechanical Study on the Differences in Lower-Limb Characteristics During Aquatic versus Land-Based Gait at Various Speeds	Zhizong Tan <sup>1</sup> , Yaqian Qi <sup>2</sup>	<sup>1</sup> Shanghai Research Institution of Sport Science, <sup>2</sup> Shanghai Research Institution of Sports Science
25454	P2-C-14 - Quantifying Changes to Paraspinal Muscle Pennation Angle in Response to Alterations in Lumbar Posture and Muscle Activation	Shawn Beaudette <sup>1</sup> , Emma Ratke <sup>1</sup> , Jared Seick <sup>1</sup> , Libby Pirritano <sup>1</sup> , Jane Jowett <sup>1</sup> , Kashish Rakesh Motiyani <sup>1</sup> , Chris Vellucci <sup>1</sup> , Nicole Chimera <sup>1</sup>	<sup>1</sup> Brock University
24831	P2-E-15 - Frequency modulation of muscle tendon vibration-induced postural reactions: Implications for protocol standardization	Alexis Nicole <sup>1</sup> , Louis-David Beaulieu <sup>1</sup> , Michaël Bertrand-Charette <sup>1</sup>	<sup>1</sup> Université du Québec à Chicoutimi
24940	P2-E-16 - Detection of motor unit loss through analysis of the EMG amplitude profile during ramp contractions recorded with needle electrodes	Silvia Recalde-Villamayor <sup>1</sup> , Javier Rodriguez-Falces <sup>1</sup> , Javier Navallas <sup>1</sup> , Cristina Mariscal Aguilar <sup>2</sup>	<sup>1</sup> Public University of Navarra, <sup>2</sup> University Hospital of Navarra



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25112	P2-E-17 - More Activation for Less Force? Increased HD-sEMG RMS in Charcot-Marie-Tooth disease type 1A (CMT1A)	Benedict Kleiser <sup>1</sup> , Robert Hunter <sup>2</sup> , Katie M. Di Sebastiano <sup>2</sup> , Justus Marquetand <sup>1,3</sup> , Thomas Klotz <sup>4</sup> , Burak Senay <sup>1,5</sup>	<sup>1</sup> Hertie-Institute for Clinical Brain Research, University of Tübingen, Tübingen, Germany, <sup>2</sup> Department of Sport and Exercise Sciences, Durham University, Durham, United Kingdom, <sup>3</sup> University of Tübingen, <sup>4</sup> Institute for Modelling and Simulation of Biomechanical Systems, University of Stuttgart, Germany, <sup>5</sup> University of Tübingen - Hertie Institute for Clinical Brain Research
25334	P2-E-18 - Mapping the cortical representations of shoulder muscles in adults with rotator cuff related shoulder pain: A TMS study	Yuyao Ma <sup>1</sup> , Wolbert Van Den Hoorn <sup>1</sup> , Giacomo Nardese <sup>2,3</sup> , Viana Vuvan <sup>1,4</sup> , Graham Kerr <sup>3,5</sup> , Paul Hodges <sup>1,4</sup>	<sup>1</sup> The University of Queensland, <sup>2</sup> Queensland University of Technology, School of Exercise and Nutrition Sciences, Australia, <sup>3</sup> Queensland University of Technology, <sup>4</sup> The University of Queensland, School of Health and Rehabilitation Sciences, Australia, <sup>5</sup> The Queensland University of Technology, School of Exercise and Nutrition Sciences, Australia
25392	P2-E-19 - Neural plasticity of the tibial-pelvic floor reflex after sensory stimulation of the foot	Yao Sun <sup>1</sup> , Molly Strain <sup>1</sup> , Tania Lam <sup>1</sup>	<sup>1</sup> University of British Columbia
25402	P2-E-20 - Muscle weakness and motor unit remodelling in intrinsic foot muscle of individuals with diabetic peripheral neuropathy	Rui Wu <sup>1</sup> , Rujin Tian <sup>2</sup> , Zhiyuan Lu <sup>2</sup> , Xiaoli Ma <sup>3</sup> , Ping Zhou <sup>2</sup> , Giuseppe De Vito <sup>4</sup> , Madeleine Lowery <sup>1</sup>	<sup>1</sup> University College Dublin, <sup>2</sup> University of Health and Rehabilitation Sciences, <sup>3</sup> Qingdao Municipal Hospital, <sup>4</sup> University of Padova
22572	P2-F-21 - A Wearable Electrode Sleeve to Improve Functional Electrical Stimulation Delivery for Individuals with Cervical Spinal Cord Injury	Erin Clark <sup>1</sup> , Eugene Brukman <sup>2</sup> , Skye Carlson <sup>1</sup> , Eric Scheerer <sup>3</sup>	<sup>1</sup> Cleveland State University, <sup>2</sup> Pratt Institute, <sup>3</sup> The MetroHealth System
24683	P2-F-22 - Optimisation of neuromuscular electrical stimulation parameters for	Meghan Tanel <sup>1</sup> , Siyue Kong <sup>2</sup> , Katherine Leigh Hull <sup>2</sup> , Niamh Quann <sup>2</sup> , Emma	<sup>1</sup> Loughborough University, <sup>2</sup> University of Leicester



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	treating sarcopenia in people on haemodialysis	Watson <sup>2</sup> , James O Burton <sup>2</sup> , Jakob Škarabot <sup>1</sup> , Jonathan P Folland <sup>1</sup>	
23756	P2-G-23 - Acute Effects of Blood Flow Restriction on Central Motor Drive and Neuromuscular Excitability.	Franziska Bubeck <sup>1</sup> , Oliver Röhrle <sup>1</sup> , Leonardo Gizzi <sup>1,2</sup>	<sup>1</sup> University of Stuttgart, <sup>2</sup> Fraunhofer Institute for Manufacturing Engineering and Automation
24177	P2-G-24 - Changes in EMG-EMG coherence of ankle muscles during a submaximal fatigue task.	Martin Bilodeau <sup>1</sup>	<sup>1</sup> University of Ottawa
24753	P2-G-25 - Associations Between Force Control and Motor Unit Characteristics in Individuals with Anterior Cruciate Ligament Reconstruction	Ava Schwartz <sup>1</sup> , David Sherman <sup>2</sup> , Tatiana Restrepo <sup>1</sup> , Matt Stock <sup>1</sup> , Jason Defreitas <sup>3</sup> , Scott Bonette <sup>4</sup> , Meredith Chaput <sup>1</sup> , Grant Norte <sup>1</sup>	<sup>1</sup> University of Central Florida, <sup>2</sup> Northeastern University, <sup>3</sup> Syracuse University, <sup>4</sup> Cincinnati Children's Hospital
25195	P2-G-26 - Pulse Number vs. Frequency: Faster isn't always best	Alexander Paish <sup>1</sup> , Brian Dalton <sup>1</sup> , Neil Eves <sup>1</sup> , Chris Mcneil <sup>1</sup>	<sup>1</sup> University of British Columbia, Okanagan
25199	P2-G-27 - Acute eccentric cycling reduces jump height and reactive strength index, with trial effects in drop jumps	Laura Ghiotto <sup>1</sup> , Samuel D'emanuele <sup>2</sup> , Mahsa Amini <sup>2</sup> , Alessandro Murgia <sup>2</sup> , Marta Schiavo <sup>2</sup> , Alessandro Pileri <sup>2</sup> , Federico Schena <sup>2</sup> , Cantor Tarperi <sup>2</sup>	<sup>1</sup> University of Verona, <sup>2</sup> Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona
25442	P2-G-28 - MULTIDIMENSIONAL FATIGABILITY ASSESSMENT IN OLDER ADULTS OF SOUTHERN SWITZERLAND: PRELIMINARY RESULTS.	Matteo Beretta-Piccoli <sup>1</sup> , Stefano Vercelli <sup>2</sup> , Marco Barbero <sup>3</sup> , Griseri Marco <sup>4</sup> , Nancy Glynn <sup>5</sup> , Corrado Cescon <sup>3</sup>	<sup>1</sup> University of Applied Sciences and Arts of southern Switzerland, <sup>2</sup> Rehabilitation Research Laboratory 2rLab, DEASS, SUPSI, Switzerland, <sup>3</sup> University of Applied Sciences and Arts of Southern Switzerland, <sup>4</sup> University of applied sciences and arts of southern Switzerland, <sup>5</sup> University of Pittsburgh
25457	P2-G-29 - Measuring sEMG during long duration hikes: a repeated measure data set to test the sensitivity and robustness of	Laurent Bouyer <sup>1</sup> , Cathy Morin <sup>2</sup> , Quentin Mascret <sup>3</sup> , Ali Riaz <sup>4</sup> , Benoit Gosselin <sup>1</sup> , Younès Messaddeq <sup>1</sup>	<sup>1</sup> Université Laval, <sup>2</sup> Cirris- Université Laval, <sup>3</sup> Cirris - Université Laval, <sup>4</sup> COPL - Université Laval



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	the median frequency for detecting muscle fatigue outside the laboratory - initial results.		
25407	P2-H-30 - MUniverse: A Simulation and Benchmarking Suite for Motor Unit Decomposition	Pranav Mamidanna <sup>1</sup> , Thomas Klotz <sup>2</sup>	<sup>1</sup> Imperial College London, <sup>2</sup> University of Stuttgart
25440	P2-H-31 - Signal processing standard package for high-density surface electromyography in clinical applications	Francisco Samuel Neves Fidalgo <sup>1</sup> , Rafael Castro Aguiar <sup>2</sup> , Miguel Velhote Correia <sup>3</sup>	<sup>1</sup> INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência (504441361), <sup>2</sup> INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência, <sup>3</sup> INESC TEC, Faculdade de Engenharia, Universidade do Porto
25441	P2-H-32 - Effect of subject-specific anisotropy on motor unit action potential and HDsEMG features	Jérémy Liegey <sup>1</sup> , Diego Pereira Botelho <sup>1</sup> , Madeleine Lowery <sup>1</sup>	<sup>1</sup> University College Dublin
25239	P2-I-33 - Too Short to Learn: Low-Force Isometric Control is Stable Within a Single Session	Burak Senay <sup>1</sup> , Justus Marquetand <sup>2</sup> , Jannick Sheuber <sup>3</sup> , Benedict Kleiser <sup>4</sup>	<sup>1</sup> University of Tübingen - Hertie Institute for Clinical Brain Research, <sup>2</sup> University of Tübingen, <sup>3</sup> Department of Neural Dynamics and Magnetoencephalography, Hertie-Institute for Clinical Brain Resea, <sup>4</sup> Hertie-Institute for Clinical Brain Research, University of Tübingen, Tübingen, Germany
25246	P2-I-34 - Closed-loop Neuroprosthetic Control through Spared Neural Activity Restores Proportional Foot Movements after Spinal Cord Injury	Vlad Cnejevici <sup>1,2</sup> , Matthias Ponfick <sup>3</sup> , Raul Sîmpetru <sup>2,4</sup> , Alessandro Del Vecchio <sup>2,4</sup>	<sup>1</sup> Friedrich-Alexander Universität Erlangen-Nürnberg, <sup>2</sup> Friedrich-Alexander Universität, Erlangen-Nürnberg, <sup>3</sup> Krankenhaus Rummelsberg GmbH, <sup>4</sup> Friedrich-Alexander Universität; Erlangen-Nürnberg
25323	P2-I-35 - Menstrual cycle-related differences in least and most steady periods of sustained submaximal force	Lani Campbell <sup>1</sup> , Cori Calkins <sup>1</sup> , Jennifer Jakobi <sup>1</sup>	<sup>1</sup> University of British Columbia Okanagan



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25359	P2-I-36 - Multimodal Assessment of Finger Individuation by Cortical, Corticospinal, and Behavioral Features	Macey Higdon <sup>1</sup> , Mansour Taleshi <sup>1,2</sup> , Joel Rouste <sup>1</sup> , Tuomas Mutanen <sup>1</sup> , Vadim V. Nikulin <sup>3</sup> , Elena Ukharova <sup>1</sup> , Selja Vaalto <sup>4</sup> , Risto Ilmoniemi <sup>1</sup> , Pantelis Lioumus <sup>1</sup> , Ivan Vujaklia <sup>1</sup> , Hanna Renvall <sup>1,5</sup> , Maria Nazarova <sup>1</sup>	<sup>1</sup> Aalto University, <sup>2</sup> University of Jyväskylä, <sup>3</sup> Max Planck Institute for Human Cognitive and Brain Sciences, <sup>4</sup> Helsinki University Hospital, <sup>5</sup> Aalto University and Helsinki University Hospital
25383	P2-I-37 - Does the training of single digits extension adjust the distribution of neural drives to hand muscles?	Rachel Borne <sup>1</sup> , Thomas Praud <sup>2</sup> , Francois Hug <sup>3</sup> , Simon Avrillon <sup>1</sup>	<sup>1</sup> Nantes Université, <sup>2</sup> Nantes Université, Movement Interactions Performance, <sup>3</sup> Université Côte d'Azur
25387	P2-I-38 - MyoKin3X: A Myoelectric Interface for Single- and Multi-Digit 3D Force Feedback	Marius Oßwald <sup>1</sup> , Charlotte Rohleder <sup>1</sup> , Alessandro Del Vecchio <sup>2</sup>	<sup>1</sup> Friedrich-Alexander-Universität Erlangen-Nürnberg, <sup>2</sup> Friedrich-Alexander-Universität Erlangen-Nürnberg
25399	P2-I-39 - Kohnstamm-like EMG activity induced by sustained low-intensity trapezius activation	Marco Barbero <sup>1</sup> , Alessandro Schneebeli <sup>1</sup> , Stefano Vercelli <sup>2</sup> , Corrado Cescon <sup>1</sup>	<sup>1</sup> University of Applied Sciences and Arts of Southern Switzerland, <sup>2</sup> Rehabilitation Research Laboratory 2rLab, DEASS, SUPSI, Switzerland
25404	P2-I-40 - Cutaneous sensory stimulation enhances cervicomedullary motor-evoked potential amplitudes	Hamid Amoozi <sup>1,2</sup> , Rafael Fujita <sup>3</sup> , Greg Pearcey <sup>3</sup> , Duane Button <sup>3</sup>	<sup>1</sup> Memorial University of Newfoundland St. John's, NL, Canada, <sup>2</sup> School of Human Kinetics & Recreation Memorial University of Newfoundland St. John's, NL, Canada, <sup>3</sup> Memorial University of Newfoundland
25429	P2-I-41 - Assessing corticospinal and spinal excitability of the biceps brachii during maximal repeated arm cycling sprint exercise: A pilot study	Shaemus Best <sup>1</sup> , Garreth Kippenhuck <sup>2</sup> , Evan Lockyer <sup>2</sup> , Hamid Amoozi <sup>3</sup> , Shahab Alizadeh <sup>4</sup> , Duane Button <sup>5</sup>	<sup>1</sup> Memorial University Of Newfoundland and Labrador, <sup>2</sup> Memorial University of Newfoundland and Labrador, <sup>3</sup> Memorial University of Newfoundland St. John's, NL, Canada, <sup>4</sup> University of Calgary, <sup>5</sup> Memorial University of Newfoundland
25472	P2-I-42 - Comparisons of the proprioceptive sense of force and position between the sexes	Kaitlyn Sutton <sup>1</sup> , Jordan Winter <sup>1</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland



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25473	P2-I-43 - Effects of antagonist tendon vibration on the reproduction of torque during dynamic contractions	Kaitlyn Sutton <sup>1</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland
24945	P2-J-44 - Multimodal Characterisation of Gait Neural Control in Peroneal Nerve Palsy	Monika Jasenska <sup>1,2</sup> , Barbora Kolarova <sup>3</sup> , Jiri Hornicek <sup>3</sup> , Petr Hlustik <sup>3</sup> , Ales Holobar <sup>4</sup>	<sup>1</sup> University Hospital Olomouc, <sup>2</sup> Palacký University Olomouc, <sup>3</sup> Palacký University Olomouc and University Hospital Olomouc, <sup>4</sup> University of Maribor
25354	P2-J-45 - Instrumented Clinical Scale Assessment for the Characterization of Pediatric Dystonia and Spasticity	Alice Taborelli <sup>1</sup> , Federica Graziola <sup>2</sup> , FRANCESCA LUNARDINI <sup>3</sup> , Isabella Piccioni <sup>1</sup> , Eleonora Minacapilli <sup>2</sup> , Giovanna Simonetta Zorzi <sup>4</sup> , Simona Ferrante <sup>1</sup>	<sup>1</sup> Politecnico di Milano, <sup>2</sup> IRCCS Istituto Neurologico Carlo Besta, <sup>3</sup> POLITECNICO DI MILANO, <sup>4</sup> IRCCS Istituto Neurologico Carlo Besta
25475	P2-J-46 - The effect of various states of muscle activation on tonic vibration reflex responses in the paretic upper limb of chronic hemiparetic stroke survivors with mild to moderate impairment	Kimberly Bassindale <sup>1</sup> , CJ Heckman <sup>1</sup> , Julius Dewald <sup>1</sup>	<sup>1</sup> Northwestern University
24797	P2-K-47 - An Exploration of HDsEMG Decomposition of the Triceps Surae During Submaximal Plantarflexion in Males and Females	Timothy Green <sup>1</sup> , Dan Blustein <sup>2</sup> , Victoria Chester <sup>3</sup> , Usha Kuruganti <sup>3</sup>	<sup>1</sup> University of Western Ontario, <sup>2</sup> Acadia University, <sup>3</sup> University of New Brunswick
24815	P2-K-48 - Consistent Force Control Despite Distinct Motor Unit Behaviours in Tibialis Anterior and Vastus Lateralis	Claudia Sabatini <sup>1</sup> , Balint Hodossy <sup>1</sup> , Simon Avrillon <sup>2</sup> , Arnault Caillet <sup>3</sup> , François Hug <sup>4</sup>	<sup>1</sup> Imperial College London, <sup>2</sup> Nantes Université, <sup>3</sup> Yneuro, <sup>4</sup> Université Côte d'Azur
24939	P2-K-49 - Modulation of vastus medialis discharge patterns during static squat hold with hip adduction in older adults with knee osteoarthritis	Chia-Chan Wu <sup>1</sup> , Ing-Shiou Hwang <sup>1,2</sup> , Yueh Chen <sup>3</sup>	<sup>1</sup> Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, <sup>2</sup> Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, <sup>3</sup> Kaohsiung Veterans General Hospital, Tainan Branch, Taiwan



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24946	P2-K-50 - Estimates of motor unit number and size following two weeks of unilateral lower limb suspension: preliminary findings	Ricardo Mesquita <sup>1</sup> , Kaveh Pourhamidi <sup>2</sup> , Mirko Mandić <sup>1</sup> , Hatice Tankisi <sup>3</sup> , Stefan Schneider <sup>4</sup> , Constance Badali <sup>4</sup> , Saul Martin-Rodriguez <sup>1</sup> , Rodrigo Fernandez Gonzalo <sup>1</sup>	<sup>1</sup> Karolinska Institutet, <sup>2</sup> Karolinska Hospital, <sup>3</sup> Aarhus University Hospital, <sup>4</sup> German Sport University Cologne
25131	P2-K-51 - When Effects Are Small – Best Practices for Quantifying Motor Output Across the Menstrual Cycle	Sophia Jenz <sup>1</sup> , Greg Pearcey <sup>2</sup> , Sophia Jenz <sup>1</sup>	<sup>1</sup> University of Michigan, <sup>2</sup> Memorial University of Newfoundland
25308	P2-K-52 - Comparison of surface motor unit potentials obtained from intramuscular EMG and high-density surface EMG for motor unit number estimation	Kaito Igawa <sup>1</sup> , Yu-Ichi Noto <sup>2</sup> , Ales Holobar <sup>3</sup> , Kohei Watanabe <sup>1</sup>	<sup>1</sup> Chukyo University, <sup>2</sup> Kyoto Prefectural University of Medicine, <sup>3</sup> University of Maribor
25376	P2-K-53 - Electrode array segmentation increases the motor unit yield in high-density surface EMG decomposition	Mehdi Shirzadi <sup>1</sup> , Ales Holobar <sup>2</sup> , Mónica Rojas Martínez <sup>3</sup> , Joan Francesc Alonso <sup>4</sup> , Hamid Reza Marateb <sup>5</sup> , Miguel Angel Mañanas <sup>6</sup> , Silvia Muceli <sup>7</sup>	<sup>1</sup> Chalmers University of Technology; Universitat Politècnica de Catalunya-Barcelona Tech (UPC), <sup>2</sup> University of Maribor, <sup>3</sup> Universitat Politècnica de Catalunya, <sup>4</sup> Universitat Politècnica de Catalunya-Barcelona Tech (UPC), <sup>5</sup> UPC, Barcelonatec, <sup>6</sup> Universitat Politècnica de Catalunya - Barcelona Tech (UPC), <sup>7</sup> Chalmers University of Technology
25384	P2-K-54 - Evaluating sex differences in motor unit yield by comparing surface EMG electrode densities.	J Greig Inglis <sup>1</sup> , Silvia Rio <sup>1</sup> , Hélio Cabral <sup>2</sup> , Emma Ratke <sup>3</sup> , Milena Dos Santos <sup>4</sup> , Francesco Negro <sup>1</sup>	<sup>1</sup> Università degli Studi di Brescia, <sup>2</sup> Federal University of Rio de Janeiro, <sup>3</sup> Brock University, <sup>4</sup> University of Brescia
25385	P2-K-55 - Frequency- and intensity-dependent transmission of afferent synaptic inputs to spinal motoneurons	Elmira Pourreza <sup>1</sup> , Milena Aguiar Dos Santos <sup>1,2</sup> , Nijia Hu <sup>2</sup> , Hélio Cabral <sup>3</sup> , J Greig Inglis <sup>1</sup> , Francesco Negro <sup>1</sup>	<sup>1</sup> Università degli Studi di Brescia, <sup>2</sup> University of Brescia, <sup>3</sup> Federal University of Rio de Janeiro
25411	P2-K-56 - Motor unit activation during the immediate response to standing external perturbations	Jayne Garland <sup>1</sup> , Tanya Ivanova <sup>1</sup> , Ales Holobar <sup>2</sup>	<sup>1</sup> Western University, <sup>2</sup> University of Maribor



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25412	P2-K-57 - Influence of arm posture on motor unit action potential waveforms during grasping	Indya Ceroni <sup>1</sup> , Hélio Cabral <sup>2</sup> , Francesco Negro <sup>3</sup> , Marianna Semprini <sup>1</sup>	<sup>1</sup> Istituto Italiano di Tecnologia, <sup>2</sup> Federal University of Rio de Janeiro, <sup>3</sup> Università degli Studi di Brescia
25422	P2-K-58 - Separation of mixed motor unit firing trains using a PCA and PSO-based algorithm	Zuyu Du <sup>1</sup> , Lara Mc Manus <sup>1</sup>	<sup>1</sup> Trinity College Dublin
25427	P2-K-59 - Generating reliable training datasets for neural network-based motor unit counting in high-density surface EMG	Matjaž Divjak <sup>1</sup> , Ales Holobar <sup>1</sup>	<sup>1</sup> University of Maribor
25435	P2-K-60 - Residual force enhancement and depression effects on motor unit behaviour	Riley Pike <sup>1</sup> , Ben Nazaroff <sup>1</sup> , Olivia Ryan <sup>1</sup> , Geoffrey Power <sup>2</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland, <sup>2</sup> University of Guelph
25446	P2-K-61 - Priming the motor pool: the effects of warmup exercise on triceps surae motor unit firing patterns	Liam Bavis <sup>1</sup> , Riley Pike <sup>1</sup> , Rafael Fujita <sup>1</sup> , Emma Mitchell <sup>1</sup> , Kaitlyn Sutton <sup>1</sup> , Jakob Škarabot <sup>2</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland, <sup>2</sup> Loughborough University
25447	P2-K-62 - Motor unit firing patterns across time of day	Nicholas Maher <sup>1</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland
25458	P2-K-63 - Exploring Sex Differences in Motor Unit Properties with Absolute and Relative Torques	Cori Calkins <sup>1</sup> , Ben Nazaroff <sup>2</sup> , Gregory Pearcey <sup>3</sup> , Jennifer Jakobi <sup>1</sup>	<sup>1</sup> University of British Columbia Okanagan, <sup>2</sup> Memorial University of Newfoundland, <sup>3</sup> Memorial University
25460	P2-K-64 - Have some patience: determining the time required to mitigate repeated activation effects on motor unit recruitment	Emma Mitchell <sup>1</sup> , Ethan Kean <sup>1</sup> , Rafael Fujita <sup>1</sup> , Nicholas Maher <sup>1</sup> , Jakob Škarabot <sup>2</sup> , Greg Pearcey <sup>1</sup>	<sup>1</sup> Memorial University of Newfoundland, <sup>2</sup> Loughborough University
22548	P2-L-65 - Muscle synergies as a dynamic gait outcome for botulinum toxin therapy in individuals with post-stroke hemiparesis: a pilot study	Yuta Chujo <sup>1</sup> , Nobuhiko Takeda <sup>1</sup> , Naoto Mano <sup>2</sup> , Hiroaki Tanaka <sup>1,2</sup> , Kimihiko Mori <sup>1</sup> , Kimitaka Hase <sup>1</sup>	<sup>1</sup> Kansai Medical University, <sup>2</sup> Kansai Medical University Hospital



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22587	P2-L-66 - Exploring proximal-to-distal muscle coupling patterns in selective motor control impairments in children with Cerebral Palsy	Ellis Van Can <sup>1</sup> , Jente Willaert <sup>1,2</sup> , Kaat Desloovere <sup>1,2</sup> , Anja Van Campenhout <sup>1,2</sup> , Friedl De Groote <sup>1,2</sup>	<sup>1</sup> KU Leuven, <sup>2</sup> Katholieke Universiteit Leuven
25401	P2-L-67 - Deep Brain Stimulation Alters Dual-Task Prioritization During Walking in Parkinson's Disease	Marco Ghislieri <sup>1</sup> , Lorenzo Locorotolo <sup>1</sup> , Fabrizio Sciscenti <sup>1</sup> , Marco Knaflitz <sup>2</sup> , Laura Rizzi <sup>3</sup> , Daniele Armocida <sup>3</sup> , Michele Lanotte <sup>3</sup> , Valentina Agostini <sup>1</sup>	<sup>1</sup> Politecnico di Torino, <sup>2</sup> Department of Electronics and Telecommunications, PolitoBIOMed Lab, Politecnico di Torino, Turin, It, <sup>3</sup> Department of Neuroscience "Rita Levi Montalcini", University of Turin, Turin, Italy
22434	P2-L-68 - Inter-session variability muscle synergies during upper limb elevation tasks in healthy subjects	Francesco Scandelli <sup>1</sup> , Valentina Lanzani <sup>2</sup> , Federico Temporiti <sup>3</sup> , Francesca Cappelletti <sup>1,4</sup> , Luca Canova <sup>1,4</sup> , Paola Adamo <sup>1,4</sup> , Roberto Gatti <sup>1,5</sup> , Alessandro Scano <sup>2</sup>	<sup>1</sup> IRCCS Humanitas Research Hospital, Rozzano, Milan, Italy, <sup>2</sup> STIIMA, Italian National Research Council, Milan, Italy, <sup>3</sup> Humanitas University, <sup>4</sup> Physiotherapy Unit, IRCCS Humanitas Research Hospital, Rozzano, Milan, Italy, <sup>5</sup> Humanitas Clinical and Research Center ; Humanitas University
25038	P2-M-69 - Muscle activity differs between voluntary torque-matched concentric and eccentric contractions	Abdelmohsen Eldhma <sup>1</sup> , Brent Raiteri <sup>1</sup> , Daniel Hahn <sup>1</sup>	<sup>1</sup> Ruhr University Bochum
25223	P2-M-70 - MEASURE TWICE, APPLY ONCE: EVALUATING THE INFLUENCE OF FOREARM SURFACE ELECTRODE PLACEMENT ON DATA QUALITY	Daniel Cousins <sup>1</sup> , Sophia Nikitin <sup>1</sup> , Jason Aibi <sup>1</sup> , David Gabriel <sup>1</sup> , Mike Holmes <sup>1</sup>	<sup>1</sup> Brock University
25307	P2-M-71 - Explosive and strength training improve the rate of torque development via distinct mechanisms	Francesco Salvaggio <sup>1</sup> , Ludovico Grossio <sup>1</sup> , Baptiste Bizet <sup>2</sup> , Alberto Rainoldi <sup>1</sup> , Andrea Monte <sup>2</sup> , Gennaro Boccia <sup>1</sup>	<sup>1</sup> University of Turin, <sup>2</sup> University of Verona
25348	P2-M-72 - Greater Corticospinal Excitability in Resistance-Trained Than Untrained Individuals During High-Level, but Not Low-Level, Contractions	Shosuke Shinzaki <sup>1</sup> , Sumiaki Maeo <sup>1</sup> , Nagisa Inubashiri <sup>1</sup> , Kento Dora <sup>1</sup> , Naoya Nishizawa <sup>1</sup> , Hiroaki Kanehisa <sup>2</sup> , Tadao Isaka <sup>1</sup>	<sup>1</sup> Ritsumeikan University, <sup>2</sup> National Institute of Fitness and Sports in Kanoya



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25389	P2-M-73 - Soleus muscle stiffening through reactive activation promotes tendon decoupling and facilitates body energy management during drop-like perturbations	Sebastian Bohm <sup>1</sup> , Morteza Ghasemi <sup>1</sup> , Falk Mersmann <sup>1</sup> , Thomas Roberts <sup>2</sup> , Adamantios Arampatzis <sup>3</sup>	<sup>1</sup> Humboldt-Universität zu Berlin, <sup>2</sup> Brown University, <sup>3</sup> Humboldt University Berlin
25397	P2-M-74 - Changes in neural drive and mechanical properties of the triceps surae following high-intensity passive static stretching	André Brand Bezerra Coutinho <sup>1</sup> , Hélio Cabral <sup>1</sup> , Maria Clara Albuquerque Brandão <sup>1</sup> , Liliam Oliveira <sup>1</sup>	<sup>1</sup> Federal University of Rio de Janeiro
25425	P2-M-75 - Evolution of Quadriceps Maximal Force after 1, 3 and 6th months post Anterior Cruciate Ligament Reconstruction	Rony Silvestre A. <sup>1</sup> , Joan Cadefau <sup>2</sup> , Josep María Padullés <sup>2</sup> , Cristian Paris <sup>3</sup> , Roberto Yañez <sup>4</sup> , Klaus Samson Nilo <sup>5</sup>	<sup>1</sup> Centro de Innovación, Clínica MEDs, Santiago, Chile., <sup>2</sup> INFEC, Universidad de Barcelona, Santiago, Spain., <sup>3</sup> Universidad Adolfo Ibáñez, Chile., <sup>4</sup> Traumatología, Clínica MEDs, Santiago, Chile., <sup>5</sup> Centro de Destrezas NOXIS, Clínica MEDs, Chile.
25462	P2-M-76 - Altered step-to-step covariation amongst quadriceps and hamstring muscle activity following anterior cruciate ligament rupture during locomotion	Cristiano Alessandro <sup>1</sup> , Kevin Soter <sup>1</sup> , Celia L. Blanchet <sup>1</sup> , Mauro Nardon <sup>1</sup> , Francesco Parolini <sup>1</sup> , Massimo Dagnelut <sup>1</sup> , Alice Ranzini <sup>2</sup> , Marco Turati <sup>1</sup> , Marco Bigoni <sup>1</sup> , Matteo Zago <sup>2</sup> , Francesco Negro <sup>3</sup> , Cecilia Perin <sup>1</sup> , Antonio Zaza <sup>1</sup>	<sup>1</sup> University of Milano-Bicocca, <sup>2</sup> University of Milan, <sup>3</sup> Università degli Studi di Brescia
25471	P2-M-77 - The muscle spindle behaves as a tunable feedback controller during perturbed locomotion	Surabhi Simha <sup>1</sup> , Gregory Sawicki <sup>2</sup> , Timothy Cope <sup>3</sup> , Lena Ting <sup>4</sup>	<sup>1</sup> Georgia Institute of Technology & Emory University, <sup>2</sup> Georgia Institute of Technology, <sup>3</sup> Georgia Institute of Technology, <sup>4</sup> Emory University & Georgia Institute of Technology
25118	P2-N-78 - Ultrasonographic evaluation of bilateral symmetry in Achilles tendon sub-tendon morphology and twist architecture	Masaki Ishikawa <sup>1</sup> , Ayaka Nobue <sup>2</sup>	<sup>1</sup> Osaka University of Health and Sport Sciences, <sup>2</sup> Morinomiya University of Medical Sciences



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25371	P2-N-79 - Ultrasound-based methods to track skeletal muscle architecture in unconstrained dynamic tasks: a comparative study	Elena Cesti <sup>1</sup> , Marco Carbonaro <sup>2</sup> , Marta Boccardo <sup>1</sup> , Francesca Truscillo <sup>1</sup> , Silvia Seoni <sup>1</sup> , Giacinto Luigi Cerone <sup>1,3</sup> , Kristen Meiburger <sup>1</sup> , Brent Raiteri <sup>4</sup> , Alberto Botter <sup>1</sup>	<sup>1</sup> Politecnico di Torino, <sup>2</sup> University of Twente, <sup>3</sup> LISiN - Politecnico di Torino, <sup>4</sup> Ruhr University Bochum
25374	P2-N-80 - Magnetomyography in a Person-Sized Magnetic Shield Using Optically Pumped Magnetometers	Eelis Eklund <sup>1</sup> , Lauri Parkkonen <sup>1</sup> , Harri Piitulainen <sup>2</sup> , Joonas Iivanainen <sup>1</sup> , Olli Pikkarainen <sup>3</sup>	<sup>1</sup> Aalto University, <sup>2</sup> University of Jyväskylä, <sup>3</sup> Aalto University, Department of Neuroscience and Biomedical Engineering
25468	P2-N-81 - Similar regional hypertrophy of the biarticular rectus femoris after hip flexion and knee extension training	Naoya Nishizawa <sup>1</sup> , Sumiaki Maeo <sup>1</sup> , Yuto Kobayashi <sup>1</sup> , Momoka Kinoshita <sup>1</sup> , Hoshizora Ichinose <sup>1</sup> , Yuuri Eihara <sup>1</sup> , Haruto Arai <sup>1</sup> , Hiroaki Kanehisa <sup>2</sup> , Tadao Isaka <sup>1</sup>	<sup>1</sup> Ritsumeikan University, <sup>2</sup> National Institute of Fitness and Sports in Kanoya
25123	P2-O-82 - The effect of eccentric exercise-induced delayed onset neck muscle soreness on force steadiness and the spatial distribution of neck extensor muscle activity	Hirofumi Sageshima <sup>1</sup> , Michail Arvanitidis <sup>2</sup> , Georgios Sidiropoulos <sup>3</sup> , Yaron River <sup>4</sup> , Deborah Falla <sup>2</sup>	<sup>1</sup> Charles University, <sup>2</sup> University of Birmingham, <sup>3</sup> University of Thessaly, <sup>4</sup> Hillel Yaffe Medical Centre
22555	P2-P-83 - ElectroMyographic Biomarkers for Rehabilitation after Stroke (EMBRs)	Jasmine Usher <sup>1</sup> , Martin Seyres <sup>1</sup> , Jacqui Morris <sup>1</sup> , Alejandra Aranceta-Garza <sup>1</sup>	<sup>1</sup> University of Dundee
25219	P2-P-84 - Long-term effects of hamstring-tendon ACL reconstruction on explosive knee-flexor strength: morphological and neural mechanisms	Tamara Valenčič <sup>1</sup> , Jakob Škarabot <sup>1</sup> , Thomas Hazeldine <sup>1,2</sup> , Subhra Dipta Ghosh <sup>2</sup> , Lauren Ayers <sup>1,2</sup> , Yuhang Li <sup>1,2</sup> , Ales Holobar <sup>3</sup> , Stefan Kluzek <sup>4,5</sup> , Jonathan P Folland <sup>1</sup>	<sup>1</sup> Loughborough University, <sup>2</sup> Loughborough University, United Kingdom, <sup>3</sup> University of Maribor, <sup>4</sup> University of Nottingham, <sup>5</sup> Wake Forest University
25254	P2-P-85 - The dose-response relationship of musculo-tendinous vibration training: study protocol	Emy Nerriere <sup>1,2</sup> , Vincent Malejac <sup>2</sup> , Mathias Velarde <sup>2,3</sup> , Hugo Bessaguet <sup>4</sup> , Charles-Étienne Benoît <sup>5</sup> , Thomas Lapole <sup>2</sup>	<sup>1</sup> Université Jean Monnet, Saint-Étienne, <sup>2</sup> Université Jean Monnet Saint-Etienne, Laboratoire Interuniversitaire de Biologie de la Motricité, <sup>3</sup> Jean Monnet University, <sup>4</sup>



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			Université Jean Monnet Saint-Etienne, CHU Saint-Etienne, Service de MPR, <sup>5</sup> Centre de Recherche de Neurosciences de Lyon, Université Claude Bernard Lyon 1
25368	P2-P-86 - Focal vibration as a countermeasure to ULLS-induced neuromuscular deconditioning	Mathias Velarde <sup>1</sup> , Leonard Feasson <sup>2</sup> , Vincent Malejac <sup>2</sup> , Emy Nerriere <sup>3</sup> , Hugo Bessagnet <sup>4</sup> , Geraldine Poenou <sup>5</sup> , Laurence Vico <sup>6</sup> , Maximilien Bowen <sup>7</sup> , Baptiste Morel <sup>7</sup> , Mathieu Berger <sup>2</sup> , Guillaume Millet <sup>2</sup> , Giacomo Valli <sup>8</sup> , Damien Freyssenet <sup>2</sup> , Thomas Lapole <sup>2</sup>	<sup>1</sup> Jean Monnet University, <sup>2</sup> Université Jean Monnet Saint-Etienne, Laboratoire Interuniversitaire de Biologie de la Motricité, <sup>3</sup> Université Jean Monnet, Saint-Étienne, <sup>4</sup> Université Jean Monnet Saint-Etienne, CHU Saint-Etienne, <sup>5</sup> Department of Vascular Medicine and Therapeutics, <sup>6</sup> U1059 Sainbiose, INSERM, Université Jean Monnet, Mines St Etienne, <sup>7</sup> Univ Savoie Mont Blanc, Interuniversity Laboratory of Human Movement Sciences, <sup>8</sup> Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy
25375	P2-P-87 - Peroneus brevis muscle size and ankle strength adaptations during the first 12 weeks following lateral ankle ligament reconstruction	Annabelle Calderon <sup>1,2</sup> , Christopher Cleary <sup>3,4</sup> , Trisha Evans <sup>2</sup> , Sterre Van Der Ziel <sup>5,6</sup> , Ian Harmon <sup>6,7</sup> , Hunter Post <sup>6,7</sup> , Bryan Vopat <sup>6,8</sup> , Yu Gu <sup>2</sup> , Wanyan Su <sup>2</sup> , Yu Song <sup>2</sup> , Trent Herda <sup>2</sup> , Ashley Herda <sup>2</sup>	<sup>1</sup> The University of Kansas, <sup>2</sup> University of Kansas, <sup>3</sup> Univeristy of Kansas, <sup>4</sup> Skidmore College, <sup>5</sup> University Medical Centre Groningen, <sup>6</sup> University of Kansas Medical Center, <sup>7</sup> The University of Kansas Medical Center, <sup>8</sup> University of Kansas Health Systems
25419	P2-P-88 - Augmented Reality EMG Biofeedback for Optimizing Upper-to-Middle Trapezius Activation During Seated Row Training: A Pilot Comparison with Conventional Coaching	Arman Farsi <sup>1</sup> , Giacinto Luigi Cerone <sup>1,2</sup> , Michail Arvanitidis <sup>3</sup> , Deborah Falla <sup>3</sup> , Marco Gazzoni <sup>1</sup>	<sup>1</sup> Politecnico di Torino, <sup>2</sup> LISiN - Politecnico di Torino, <sup>3</sup> University of Birmingham
25434	P2-P-89 - ROUTINELY USED STANDARDIZED MEASURES OF PARTICIPATION AFTER STROKE: A SYSTEMATIC REVIEW	Tamara Eichelberger <sup>1</sup>	<sup>1</sup> Azusa Pacific University
25456	P2-P-90 - Differences in quadriceps and hamstring muscle activation in female	Ashley Herda <sup>1</sup>	<sup>1</sup> University of Kansas



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	anterior cruciate ligament reconstruction surgical patients		
25470	P2-P-91 - Differential recruitment of dorsal root and cutaneous afferents during transcutaneous spinal cord stimulation	Stephanie Larosa <sup>1</sup> , Jonah Rivette <sup>1</sup> , Keith Fenrich <sup>1</sup> , David Collins <sup>1</sup>	<sup>1</sup> University of Alberta
25476	P2-P-92 - Transcutaneous spinal cord stimulation excites biceps femoris motoneurons by recruiting afferents in the dorsal roots and skin of the back	Jonah Rivette <sup>1</sup> , Stephanie A. Larosa <sup>1</sup> , David F. Collins <sup>1</sup>	<sup>1</sup> University of Alberta
25501	P2-P-93 - Evaluating the effects of Cognitive load on Postural stability And Balance recovery mechanisms in younger adults.	Imran Amjad <sup>1</sup> , Imran Khan Niazi <sup>2</sup> , Ayesha Sajid <sup>3</sup> , Kelly Holt <sup>4</sup> , Heidi Haavik <sup>2</sup>	<sup>1</sup> New Zealand College of Chiropractic, Mount Wellington, Auckland, New Zealand, <sup>2</sup> New Zealand College of Chiropractic, <sup>3</sup> Faculty of Rehabilitation and Allied Health Sciences, Riphah International University, Islamabad 460, <sup>4</sup> Centre for Chiropractic Research, New Zealand College of Chiropractic, Auckland 1060, New Zealand
25372	P2-R-94 - Hypertrophic and strength adaptations after knee extension and leg press exercises performed alone or in combination	Momoka Kinoshita <sup>1</sup> , Sumiaki Maeo <sup>1</sup> , Yuuto Kobayashi <sup>1</sup> , Yuuri Eihara <sup>1</sup> , Naoya Nishizawa <sup>1</sup> , Hoshizora Ichinose <sup>1</sup> , Yuki Kusagawa <sup>1</sup> , Takashi Sugiyama <sup>2</sup> , Taku Wakahara <sup>3</sup> , Hiroaki Kanehisa <sup>4</sup> , Tadao Isaka <sup>1</sup>	<sup>1</sup> Ritsumeikan University, <sup>2</sup> Kyoto University of Advanced Science, <sup>3</sup> Doshisha University, <sup>4</sup> National Institute of Fitness and Sports in Kanoya
25420	P2-R-95 - Effects of bed rest on functional connectivity of the lumbar muscles during treadmill walking	Mathias Kristiansen <sup>1</sup> , Pascal Madeleine <sup>2</sup> , Enrico De Martino <sup>2</sup>	<sup>1</sup> Aalborg University, <sup>2</sup> Department of Health Science and Technology, Faculty of Medicine, Aalborg University, Denmark
25437	P2-R-96 - Muscle-specific modulation of motor unit discharge rates during the flat bench press exercise	João Gabriel Portilho <sup>1</sup> , Roger G. T. Mello <sup>1</sup> , Francesco Negro <sup>2</sup> , Amanda O. Silva <sup>1</sup> , Liliam Oliveira <sup>1,3</sup> , Hélio Cabral <sup>1,3</sup>	<sup>1</sup> Universidade Federal do Rio de Janeiro, <sup>2</sup> Università degli Studi di Brescia, <sup>3</sup> Federal University of Rio de Janeiro



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25438	P2-R-97 - Neural drive to the quadriceps across different force levels during parallel and sumo squat exercises	Amanda Silva <sup>1</sup> , Roger G. T. Mello <sup>1</sup> , Francesco Negro <sup>2</sup> , João Gabriel Portilho <sup>1</sup> , Liliam Oliveira <sup>1,3</sup> , Hélio Cabral <sup>1,3</sup>	<sup>1</sup> Universidade Federal do Rio de Janeiro, <sup>2</sup> Università degli Studi di Brescia, <sup>3</sup> Federal University of Rio de Janeiro
25461	P2-R-98 - Motor Unit Behavior Differs Between Single Joint and Multi Joint Isometric Exercises Assessed with High Density Surface EMG	Kevin Méndez-Bouza <sup>1</sup> , Daniel Marcos Frutos <sup>2</sup> , Amador García-Ramos <sup>3</sup> , Gonzalo Márquez <sup>4</sup>	<sup>1</sup> Faculty of Sports Sciences and Physical Education, University of A Coruna, A Coruña, Spain, <sup>2</sup> Faculty of Sport Sciences, University of Granada, Spain, <sup>3</sup> Faculty of Sport Sciences, University of Granada, Granada, Spain., <sup>4</sup> Faculty of Sports Sciences and Physical Education, Unive
25463	P2-R-99 - Bilateral Asymmetries in Explosive Movement Time and Limb-Specific Force–Power Relationships in Youth Ice Hockey Goaltenders	Jack Benson <sup>1</sup> , Seamus Best <sup>2</sup> , Rafa Fujita <sup>2</sup> , Emma Mitchell <sup>2</sup> , Ryan Murphy <sup>2</sup> , Kaitlyn Sutton <sup>2</sup> , Jordan Winter <sup>2</sup> , Duane Button <sup>2</sup> , Gregory Pearcey <sup>2</sup> , Kevin Power <sup>2</sup>	<sup>1</sup> Memorial University of Newfoundland and Labrador, <sup>2</sup> Memorial University of Newfoundland
25347	P2-S-100 - Upper Limb Kinematics Estimation from Reduced Inertial Sensor Configuration	Arthur Fabre <sup>1</sup> , Wolbert Van Den Hoorn <sup>1,2</sup> , Laith Alzubaidi <sup>1</sup> , Peter Pivonka <sup>1</sup> , Graham Kerr <sup>1</sup>	<sup>1</sup> Queensland University of Technology, <sup>2</sup> The University of Queensland
25353	P2-S-101 - Design and Validation of a High-Resolution Wearable 8-Channel sEMG System with Integrated Motion Sensing and Haptic Feedback	Mounir Shaib <sup>1,2</sup> , Vlad Cnejevici <sup>3,4</sup> , Devon Rohlf <sup>5</sup> , Raul Simpetru <sup>4,6</sup> , Alessandro Del Vecchio <sup>4,6</sup>	<sup>1</sup> Friedrich Alexander Universität, <sup>2</sup> Friedrich Alexander Universität Erlangen-Nürnberg, <sup>3</sup> Friedrich-Alexander Universität Erlangen-Nürnberg, <sup>4</sup> Friedrich-Alexander Universität, Erlangen-Nürnberg, <sup>5</sup> Friedrich-Alexanders-Universität, <sup>6</sup> Friedrich-Alexander Universität; Erlangen-Nürnberg
25373	P2-S-102 - VR Headset-Based Shoulder Tracking Validated Against Optical Motion Capture	Nima Hadavi <sup>1</sup> , Matti Itkonen <sup>1</sup>	<sup>1</sup> University of Eastern Finland
25436	P2-S-103 - Assessing post-stroke gait and stair walk using wearable motion sensors: clinical implications	Helena Grip <sup>1</sup> , Per Ertzgaard <sup>2</sup>	<sup>1</sup> Dep. of Diagnostics and Intervention, Biomedical engineering and Radiation Physics, Umeå University, <sup>2</sup> Dept of Health, Medicine and Caring Sciences, Linköping University



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25466	P2-S-104 - A Single Inertial Sensor Gait Asymmetry Score	Ivan Huuva <sup>1</sup> , Helena Grip <sup>2</sup>	<sup>1</sup> Umeå University, <sup>2</sup> Umeå University Hospital
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