



## Poster Sessions

Asia-Pacific and Europe-Africa Session

September 25, 2021, Session starts at 4pm SGP / 10.00 CEST

Europe-Africa & Americas Session

September 25, 2021, Session starts at 18.00 CEST / 12pm EDST

### 1. How to join the Poster Session

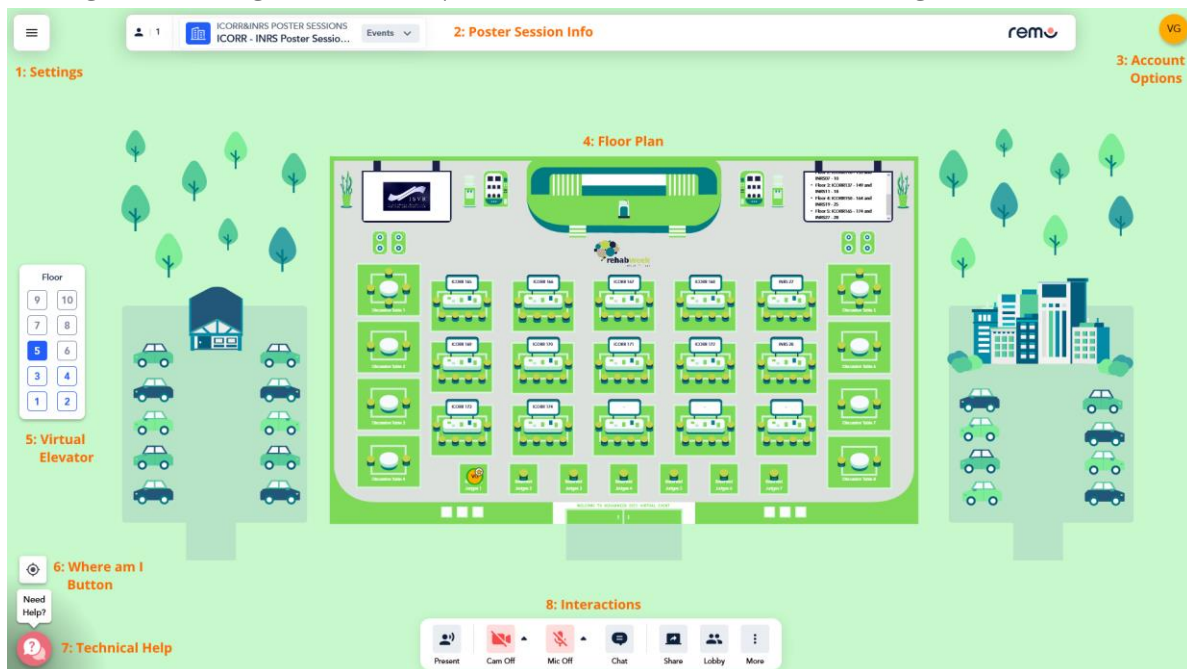
1. Click on the appropriate poster session link above to join
2. If the session has not started yet, wait patiently for the count-down to reach zero. In the meantime, you can register a spot by login in with an existing Google account or by creating a Remo account
3. As soon as the poster session opens you can click on the newly appeared "Join event now!" button
4. If you have not already logged in before you need to do that now. Use your existing Google account or alternatively create a Remo account by entering an Email address and password
5. To mingle and interact with other attendees please click on "Allow camera & microphone"
6. Your web browser will ask to have access to your camera and microphone. Click on "Allow" in the pop-up
7. On the next screen select your preferred camera, your microphone and speaker and test if they are working correctly. Remo also runs a system check to see if you meet the technical requirements to use the poster session platform
8. If you have trouble click on the "Having trouble? ..." button to get further

instructions or assistance from a Remo technician. Else click on the “Cam & mic works! Join event!” button

9. Congratulations you successfully joined the poster session

## 2. How to navigate the event

When you join the event, you are greeted with a message and see the first floor of the poster session. There are 3-5 floors for each poster session with each floor having the same general floor plan. You should see the following:



**Move:** You can navigate around on each floor using your left/middle mouse button or arrow keys

**Zoom:** Use the mouse wheel, +/- keys on the numpad to zoom in/out of the floor plan

**Find your avatar:** If you should get lost on the floor plan press the “Where am I button” (6) to zoom in on your avatar

**Find posters:** The poster boards are the virtual tables in the middle of the floor plan. Each poster can be identified through the poster number written on the table’s billboard. Posters are distributed over multiple floors and you can get an overview over poster locations from the large billboard in the top right corner of the floor plan

**Change floors:** To change floors select one of the available floor numbers on the virtual elevator (5) on the left side of the interface. Only floor numbers in blue are accessible

**Join a poster:** To join a poster double click on the virtual table of the desired poster. Your avatar will sit down if a free seat is available (seat number is restricted to 6 per table). After joining you will then see video and microphone feeds from other attendees. Listen to the poster presenter and interact with each other

**Join a discussion table:** Works the same way as poster tables but for free interactions and discussions with other attendees

**Chat with other attendees:** There is a chat function in the bottom bar which lets you chat with other attendees. The “general chat” will be visible by everyone. The “table chat” is only visible for other attendees at your current table. “Private chat” lets you send a message to selected attendees

**Change camera and microphone settings:** You can turn the camera and microphone on and off at any time using the “Cam on” and “Mic on” widgets in the interactions bar (8) at the bottom of the screen

**Show LinkedIn information:** You can connect your own avatar to LinkedIn if you click on it and afterwards on “Connect LinkedIn Profile”. The LinkedIn login will show up and you can log in with your LinkedIn account information. For the LinkedIn account information to be visible for you and others it will take approximately 2-3 minutes

**See other attendees’ LinkedIn profile:** If you click on another person’s avatar and the person has connected to his/her LinkedIn profile you will be able to see their name, contact info and the company they work for. There is also the option of connecting with that person on LinkedIn, book a meeting with them if they have a Booking.com account or message them privately

#### **4. Virtual Conference Instruction Video**

You can revisit most of the above information in the video below:

<https://www.youtube.com/watch?v=P01jxUBNU2Y>

## 10.00am CET / 4pm SGP Poster Session

Poster #	Presenting Author	Poster Title	Floor
ICORR102	Peter William Snow	Case Study To Explore the Benefit of Virtual Reality Interface Combined With Robotic Facilitated Movement To Reduce Supernumerary Phantom Limbs Occurring After Traumatic High-Level Tetraplegia (C2 AIS C)	1
ICORR103	Yansong Wang	Extracting Human-Robot Interaction Torque Based on a Novel Cable-Driven Upper-Limb Exoskeleton Equipped With Torque Sensors	1
Scientific Poster: INRS04	Hyunmi Lim	Effect of Brain Computer Interface Based Rehabilitation Combined With Action Observation and Peripheral Nerve Electrical Stimulation on Mu Suppression in Stroke Patients	1
ICORR105	Anna-Maria Georgarakis	The Myoshirt: A Textile Exomuscle That Assists the Shoulder in Everyday Life	1
Scientific Poster: INRS05	Florence Martinache	Assessment of the Effects of Early Functional Proprioceptive Stimulations in Patients With Spinal Cord Injury	1
ICORR106	Thomas Bowman	Wearable Devices for Biofeedback Rehabilitation: A Systematic Review and Meta-Analysis to Design Application Rules and Estimate the Effectiveness on Balance and Gait Outcomes in Neurological Diseases	1
ICORR107	Marek Sierotowicz	An Adaptive Filter for Low-Tolerance SEMG-Based Intention Prediction	1
Scientific Poster: INRS10	Sara Skalli	Adhesive Capsulitis: What if Robotics Rehabilitation Can Be Used for Management?	1

<b>Poster #</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR109	Chrysovalanto Messiou	Table Docking System and Negative Obstacle Detection for a Smart Wheelchair	1
Scientific Poster: INRS11	Marc Sebastián- Romagosa	Brain-Computer Interface System for Gait Rehabilitation of Chronic Stroke Patients	1
ICORR110	Giada Devittori	Minimally-Supervised Robot-Assisted Therapy After Stroke: A Feasibility Study in a Clinical Setting	1
ICORR112	Javier Sánchez Aguilar	Combined Use of LOKOMAT and RYSEN for Gait Training in Spinal Cord Injury	1
Scientific Poster: INRS12	Franziska Herzog	Study Protocol of a Clinical Investigation on Safety, Feasibility and Usability of the ABLE Exoskeleton Device With Spinal Cord Injured Patients in a Hospital Setting	1
ICORR116	Monika Zbytniewska	The Longitudinal Evolution of Proprioceptive, Motor, and Sensorimotor Hand Impairments in the Sub-Acute Phase After Stroke	1
Scientific Poster: INRS13	Ji-Eun Cho	Effects of Community-Based Ambulation Training With 3D-Printed Ankle-Foot- Orthoses on Walking on Even/Uneven Surfaces in Patients With Chronic Stroke	1
ICORR117	Jessica Gantenbein	Tailoring a Robotic Hand Orthosis For Individuals With Tetraplegia in View of Independent Use at Home	2
ICORR118	Vincent Crocher	Functional Real-world Robotic Assisted Training: The EMU Feasibility Study	2

<b>Poster #</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
Scientific Poster: INRS15	Michela Goffredo	Monitoring Patient Progress During Upper Limb Exoskeleton-assisted Stroke Rehabilitation: Analysis of Built-in Data	2
ICORR119	Chiara Basla	Validation of a Gait Safety Metric for Robot-assisted Walking With an Alcohol Intoxication Experiment	2
Scientific Poster: INRS16	Sanaz Pournajaf	Clinical and Neurophysiologic Effects of Upper Limb Robot-assisted Rehabilitation on Motor Recovery in Patients With Subacute Stroke: A Study Protocol of a Single-blind Multicenter Randomized Controlled Trial.	2
ICORR120	Eva Josse	Machine Learning-based Prediction of Upper Limb Rehabilitation Outcomes in Multiple Sclerosis: A Preliminary Analysis	2
ICORR122	Henry Eberle	Robust Sensor Fault Detection for a Shared Control Wheelchair	2
Scientific Poster: INRS17	Sofia Straudi	Motor Cortical Activation and Peripheral Blood Biomarkers in Progressive Multiple Sclerosis After a Robot-assisted Gait Training: A Secondary Analysis of the RAGTIME Trial	2
ICORR123	Yangmengfei Xu	Towards Rehabilitation of Pathological Synergies With Volitional Movement Using a Manipulandum Robot	2
Scientific Poster: INRS19	Daniele Munari	Feasibility of Adaptive Gait Support in a Robot-aided Gait Trainer (Lokomat) in Neurological Disorders	2
ICORR124	Arzu Guneyusu Ozgur	Enhancing Social Interaction in Upper Limb Rehabilitation Through Co-located and Online Multiplayer Games	2

<b>Poster #</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR125	Samantha G. Rozevink	Serious Game Based Training Using an Assistive Device at Home May Provide Long Term Improvement in the Upper Limb Function of Patients in the Chronic Phase of Stroke	2
Clinical Poster: INRS20	Nurten Küçükçakir	The Use of C-Mill VR+ for Rehabilitation of Balance and Gait Adaptability Training in a Chronic Traumatic Injury Patient.	2
ICORR127	Adam Giles Metcalf	Multi-Domain Dynamic Modelling of an Upper Limb Rehabilitation Robot for Tracking Patient Progress	2
ICORR128	Shuhao Dong	A Machine Learning Based Performance Classification for Post-Stroke Rehabilitation Using Kinematic Features	2
Clinical Poster: INRS21	Alison Sarah Bean	Masterclass in Neurotechnology (MiNT) – An Innovative Online Educational Platform Embedding the Use of Neurotechnology in Clinical Practice	3
ICORR129	Frieder Wittmann	A Novel Wheelchair Ergometer for Automatic Optimization of Seat Positions of Everyday-Life and Sports Wheelchairs	3
ICORR134	Ilaria Bortone	Adaptive Virtual Reality-based Rehabilitation in Children with Cerebral Palsy: A proof-of-concept	3
Clinical Poster: INRS22	Dominika Kozak	How Robotics Can Be Implemented for Bedside Treatment at Early Stage of Rehabilitation Process	3
ICORR136	Ahmad Zahedi	Design and Kinematic Modeling of a Novel Cable-Driven Shoulder-Elbow Exoskeleton	3
ICORR141	Lukas Bergmann	Human-in-the-Loop Optimization of Hip and Knee Assistance for Downhill Walking With the Myosuit	3

<b>Poster #</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
Clinical Poster: INRS23	Vicki Abraham	The Use of Robotic/Computer Assistive Technologies (R/CAT) During Upper Limb Rehabilitation Therapy Sessions	3
ICORR142	Yuxiao (Sonia) Lai	Feasibility of Using Low-End Wearable Armbands and Unsupervised Transfer Learning for Seamless Myoelectric Control	3
Clinical Poster: INRS24	Anna Biddiscombe	Integrating a Robotic Assisted Gait Training Device, LEXO(R), Into Clinical Practice: Gold Standard Treatment Approach	3
ICORR152	Nicolas Garcia-Aracil	Mirror Robotic Therapy Rehabilitation of Wrist and Forearm: Pilot Study	3
ICORR154	Antonio Rodríguez Fernández	A Biofeedback System for Improving Gait Performance in People With Spinal Cord Injury while Using a Wearable Exoskeleton	3
Industry Poster: INRS26	Sarah Lim	Fourier Intelligence RehabHub™	3
ICORR159	Antonio Rodríguez Fernández	Comparison of Walking With a Knee-Ankle-Foot-Orthosis (KAFO) and a Powered Knee Exoskeleton in People With Spinal Cord Injury: A Randomized Crossover Clinical Trial	3



<b>Poster #</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
Industry Poster: INRS27	Iris Jakob	Connection Is Key - Tyrotherapy Concept For Lower Extremity Rehabilitation	3
ICORR174	Marco Maddalena	Novel End-effector Device for Patient-in- charge Model-based Progressive Gait Rehabilitation	3
Industry Poster: INRS28	Katlin Creamer Tonin	From User Feedback to Meaningful Changes: Redesign of the ABLE Exoskeleton	3

## 18.00 CET/ 12pm EST Poster Session

Poser Nr	Presenting Author	Poster Title	Floor
ICORR101	Denis Mosconi	Forward Dynamics-based Simulation Algorithm for Robotic Rehabilitation Purposes	1
ICORR102	Peter William Snow	Case Study to explore the benefit of virtual reality interface combined with robotic facilitated movement to reduce supernumerary phantom limbs occurring after traumatic high-level tetraplegia (C2 AIS C)	1
ICORR104	Amanda (Harris) Bernstein	Rehabilitation and Cortical Remodeling After Surgical Intervention for Spinal Cord Injury	1
ICORR105	Anna-Maria Georgarakis	The Myoshirt: A Textile Exomuscle That Assists the Shoulder in Everyday Life	1
Scientific Poster: INRS02	Kailynn Mannella	Preliminary Validation of an Adaptive Robotic Training Program of the Hand and Wrist for Persons With Multiple Sclerosis	1
ICORR106	Thomas Bowman	Wearable Devices for Biofeedback Rehabilitation: A Systematic Review and Meta-Analysis to Design Application Rules and Estimate the Effectiveness on Balance and Gait Outcomes in Neurological Diseases	1
ICORR108	Marek Sierotowicz	An SEMS-Based Force Feedback Device for Teleoperation and Rehabilitation.	1
ICORR109	Chrysovalanto Messiou	Table Docking System and Negative Obstacle Detection for a Smart Wheelchair	1
ICORR110	Giada Devittori	Minimally-Supervised Robot-Assisted Therapy After Stroke: A Feasibility Study in a Clinical Setting	1
Scientific Poster: INRS03	Manuel Murie Fernandez	Neurovision: Visual Rehabilitation for Homonymous Hemianopsia	1

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR111	Gregory LeMasurier	Shopping Assistance for People Who Are Blind or Have Low Vision	1
ICORR113	Vishwanath Ketkar	Design and Development of a Spherical Five-Bar Thumb Exoskeleton Mechanism for Post-Stroke Rehabilitation	1
ICORR114	Christopher Bitikofer	A Novel Passivity Based Friction Gravity Adaptive Admittance Control for Upper Limb Human Exoskeleton Interaction	1
ICORR115	Pouria Faridi	A Locomotor Cat Model for Restoring Walking After Complete Spinal Cord Injury: Assessing the Capability of a Predictive Control Algorithm	1
Scientific Poster: INRS06	Behdad Parhizi	Effects of Transcutaneous Spinal Cord Stimulation on Sensorimotor Circuitry and Cervico-Lumbar Coupling in Neurologically Intact Participants	1
ICORR116	Monika Zbytniewska	The Longitudinal Evolution of Proprioceptive, Motor, and Sensorimotor Hand Impairments in the Sub-Acute Phase After Stroke	2
ICORR117	Jessica Gantenbein	Tailoring a Robotic Hand Orthosis For Individuals With Tetraplegia in View of Independent Use at Home	2
ICORR121	Ali Reza Manzoori	Comparative Evaluation of Hip Partial Assistance Control Strategies	2
ICORR126	Giulia Aurora Albanese	The Effect of Feedback Modality on Learning a Novel Wrist Visuomotor Transformation	2
Scientific Poster: INRS07	Trevor Scott Barss	Electrode Number Alters the Relationship Between the Stimulation Frequency of Functional Electrical Stimulation and Quadriceps Torque in Individuals Who Are Neurologically Intact or Living With a Spinal Cord Injury	2
ICORR127	Adam Giles Metcalf	Multi-Domain Dynamic Modelling of an Upper Limb Rehabilitation Robot for Tracking Patient Progress	2

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR129	Frieder Wittmann	A Novel Wheelchair Ergometer for Automatic Optimization of Seat Positions of Everyday-Life and Sports Wheelchairs	2
ICORR130	Heather E. Williams	Using Transfer Learning to Reduce the Burden of Training for Position-Aware Myoelectric Prosthetic Control	2
ICORR131	Luis Vargas	Functional Interaction of Objects During Myoelectric Control of a Prosthetic Hand With Non-Invasive Somatotopic Tactile Feedback	2
Scientific Poster: INRS09	Véronique Flamand	Vibratory Alerts to Counter Developmental Disregard in Children With Unilateral Cerebral Palsy: A Feasibility Study	2
ICORR132	Valeria Falzarano	Implications of Fatigue on Wrist Stiffness and Position Sense	2
ICORR133	Javad K. Mehr	Compliant Motion Planning and Intelligent Postural Stability for Lower-Limb Exoskeletons	2
ICORR134	Ilaria Bortone	Adaptive Virtual Reality-based Rehabilitation in Children with Cerebral Palsy: A Proof-of-Concept	2
ICORR135	Mojtaba Sharifi	Design, Analysis, Development, and EMG-Based Control of an Upper-Limb Exoskeleton With Soft Artificial Muscles	2
Scientific Poster: INRS10	Sara Skalli	Adhesive Capsulitis: What if Robotics Rehabilitation Can Be Used for Management?	2
ICORR137	Vahidreza Molazadeh	Novel Multilayer Perceptron Based Controller for Precise Delivery of Exoskeleton Assistance During Walking	3
ICORR138	Rhet Osborne Hailey	Rehabilitation Training Under Gravity Compensation With Harmony Exoskeleton Improves in Movement Quality for Individuals With Chronic Stroke	3

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR139	Kyoungsoon Kim	Operant Conditioning of Monosynaptic Spinal Reflexes: A Simulated Environment Approach	3
ICORR140	Andria Jean Farrens	Changes in Resting State Functional Connectivity Associated with Dynamic Adaptation of the Wrist	3
Scientific Poster: INRS11	Marc Sebastián-Romagosa	Brain-Computer Interface System for Gait Rehabilitation of Chronic Stroke Patients	3
ICORR142	Yuxiao (Sonia) Lai	Feasibility of Using Low-End Wearable Armbands and Unsupervised Transfer Learning for Seamless Myoelectric Control	3
ICORR143	Yue Zhou	Survey-based Identification of Design Requirements and Constraints for a Wearable Tremor Suppression Device	3
ICORR144	Michael Rory Dawson	Joint Action is a Framework for Understanding Partnerships Between Humans and Upper Limb Prostheses	3
ICORR145	Parisa Daemi	Comprehensive Kinematic Model of a Tendon-Driven Wearable Tremor Suppression Device	3
Scientific Poster: INRS16	Sanaz Pournajaf	Clinical and Neurophysiologic Effects of Upper Limb Robot-assisted Rehabilitation on Motor Recovery in Patients With Subacute Stroke: A Study Protocol of a Single-blind Multicenter Randomized Controlled Trial.	3
ICORR146	Michael Gonzalez	Somatotopic Sensation in Upper and Lower Limb Prosthesis Users: A Systematic Review	3
ICORR147	Keya Ghonasgi	Effects of Environmental Intervention on Learning and Performance in a Novel Motor Skill Task	3
ICORR148	Giovanni Oppizzi	Inter-Digit Coupling Changes During Active Finger Motion Post Stroke: A Preliminary Study	3

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR149	Ana De Oliveira	Assessment of Upper-body Movement Quality Using Harmony Exoskeleton	3
Scientific Poster: INRS18	Luis Enrique Sucar	Facial Therapy: A Remote Biofeedback System for Patients With Sequels of Peripheral Facial Paralysis	3
ICORR150	Paria Esmatloo	Simultaneous Real-Time Control of Hand Pose and Grasp Strength With an EMG-Driven Hand Exoskeleton	4
ICORR151	Haider Ali Chishty	Kinematic Compatibility of a Wrist Robot with Cable Differential Actuation: Effects of Misalignment Compensation via Passive Joints	4
ICORR153	Nicolas Garcia-Aracil	Physiological Reaction to Competitive Rehabilitation Game Assisted by Robotic Devices: Pilot Study With Patients	4
ICORR155	Grace Hunt	Neural Control Enables Stand-Up, Squat, Lunge, and Walk With a Robotic Knee and Ankle Prosthesis	4
Scientific Poster: INRS19	Daniele Munari	Feasibility of Adaptive Gait Support in a Robot-Aided Gait Trainer (Lokomat) in Neurological Disorders	4
ICORR156	Stephany Bonilla Montero	Model Predictive Control for Active-assisted Hand Rehabilitation Using an EMG-driven Exoskeleton	4
ICORR157	Marc-Antoine Maheux	Engineering Autonomous Robotic Solutions for Older Adults in Long-Term Care Facilities	4
ICORR158	Marshall Ishmael	Powered Hip Exoskeleton Increases Self-Selected Walking Speed in Stroke: A Case Study	4
ICORR160	Sarah Hood	Design and Amputee Testing of an Adaptive Stair Ascent Control for Powered Knee and Ankle Prostheses	4
Clinical Poster: INRS21	Alison Sarah Bean	Masterclass in Neurotechnology (MiNT) – An Innovative Online Educational	4

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
		Platform Embedding the Use of Neurotechnology in Clinical Practice	
ICORR161	Minh Tran	A Lightweight, Compact Powered Knee Prosthesis with Elastic Torque-Sensitive Actuation	4
ICORR162	Courtney Celian	A Day in the Life: A Qualitative Study of Clinical Decision-Making and Uptake of Neurorehabilitation Technology	4
ICORR163	Andrew Gunnell	Powered Knee Exoskeleton With Proportional EMG Control Improves Sit-to-Stand Transition Symmetry in a Stroke Subject	4
ICORR164	Kaitlin G. Rabe	Comparing Sonomyography and Electromyography Using Bayesian Regression to Continuously Estimate Joint Torques During Ambulation on Varying Terrains	4
Clinical Poster: INRS25	Jessi Vaught	Discovering Innovation in Existing Rehabilitation Technologies	4
ICORR165	Feng Xu	Robust Neural Decoding of Individual Finger Forces over a Multi-Day Evaluation	5
ICORR166	Lukas Gabert	Underactuated Powered Ankle and Toe Prosthesis	5
ICORR167	Ross Michael Neuman	Considering the Human Form and its Influence on the Moment- and Power-Generating Abilities of Soft Hip-Flexion Exosuits: Effects of Wearer BMI and Sex	5
ICORR168	Anna Diop	An Experimental Protocol to Study Motor Adaptation in Response to Perturbations Generated by a Lower-Limb Exoskeleton	5
Industry Poster: INRS27	Iris Jakob	CONNECTION IS KEY - TYROTHERAPY CONCEPT FOR LOWER EXTREMITY REHABILITATION	5

<b>Poser Nr</b>	<b>Presenting Author</b>	<b>Poster Title</b>	<b>Floor</b>
ICORR169	Zeynep Ozge Orhan	Preliminary Results in Partial Gait Assistance Using the lower Limb Exoskeleton autonomy	5
ICORR170	David Reinkensmeyer	Training Somatosensation With Proprioceptive Robots and Propriopixels	5
ICORR171	Jayesh Jayashankar	Combining Convolutional Neural Networks With LSTM for Real Time Decoding of Multi-Joint Arm Movements in Stroke Survivors	5
ICORR172	Rinku Roy	Prediction of Fingertip Force and Joint Kinematics of Individual Fingers Using Motoneuron Firing Activities	5
Industry Poster: INRS28	Katlin Kreamer Tonin	From User Feedback to Meaningful Changes: Redesign of the ABLE Exoskeleton	5
ICORR173	Mohid Khan	Exploring the Efficacy of Cutaneous Haptic Feedback in Post-Stroke Rehabilitation	5
ICORR174	Marco Maddalena	Novel End-effector Device for Patient-in-charge Model-based Progressive Gait Rehabilitation	5
Scientific Poster: INRS29	Hala Osman	Characterizing the feasibility of Progressive Gait Perturbation Protocol for Individuals Poststroke	5