

# Scientific Program

Day 0 — Sunday, June 9, 2019

09:00–13:00

**Room 6**

## **Long Workshop 1: Ultrasound Guided Botulinum Toxin Injections in the Treatment of Spasticity and Dystonia (Hands on Training)**

Chair: **Rajiv Reebye** [Canada]

**LW1-1**    **Use of Ultrasound for Chemodenervation in Spasticity Management: Evidence, Anatomical Localization and Clinical**  
[Rajiv Reebye](#) [Canada]

**LW1-2**    **Use of Ultrasound for Chemodenervation in Spasticity Management: Evidence, Anatomical Localization and Clinical**  
[Jordan Farag](#) [Canada]

**LW1-3**    **Use of Ultrasound for Chemodenervation in Spasticity Management: Evidence, Anatomical Localization and Clinical**  
[Finlayson Heather](#) [Canada]

**LW1-4**    **Use of Ultrasound for Chemodenervation in Spasticity Management: Evidence, Anatomical Localization and Clinical**  
[Omar Khan](#) [Canada]

09:00–11:00

**Room 7**

## **Long Workshop 3: How to Use and Implement: the International Classification of Service Organization in Rehabilitation (ICSO-R) 2.0**

Chair: **Christoph Gutenbrunner** [Germany]

**LW3-1**    **Background & Purpose of ICSO-R 2.0**  
[Thorsten Meyer](#) [Germany]

**LW3-2**    **International Classification of Service Organization in Rehabilitation (ICSO-R) 2.0**  
[Christoph Gutenbrunner](#) [Germany]

**LW3-3**    **International Classification of Service Organization in Rehabilitation (ICSO-R) 2.0**  
[Boya Nugraha](#) [Germany]

09:00–13:00

Room 8

**Long Workshop 4: Cancer Rehabilitation: Global Perspectives for the Delivery of Care**Chair: **Vishwa S Raj** [United States]

<b>LW4-0</b>	<b>Cancer Rehabilitation: Global Perspectives for the Delivery of Care</b> <i>Vishwa S Raj</i> [United States]
<b>LW4-1</b>	<b>Cancer Rehabilitation: Global Perspectives for the Delivery of Care: 2. Breast Cancer</b> <i>Ji Hye Hwang</i> [South Korea]
<b>LW4-2</b>	<b>Prostate Cancer</b> <i>Monica Pinto</i> [Italy]
<b>LW4-3</b>	<b>Sensorimotortraining in Chemotherapy Induced Polyneuropathy</b> <i>Evren Atabas</i> [Germany]
<b>LW4-4</b>	<b>Rehabilitation in Advanced Cancer</b> <i>Jae Yong Jeon</i> [South Korea]
<b>LW4-5</b>	<b>Return to Work for Cancer Survivors</b> <i>Birgit Leibbrand</i> [Germany], Anne-Kathrin Exner, Heike Kaehnert
<b>LW4-6</b>	<b>Cancer Rehabilitation: Global Perspectives for the Delivery of Care</b> <i>Christina M MacDonell</i> [United States]
<b>LW4-7</b>	<b>Sensor Technology in Rehabilitation Management</b> <i>Arash Naeim</i> [United States], Ramin Ramezani, Wenhao Zhang, Zhouer Zie, David Elashoff, Annette Stanton, Majid Sarafzadeh, John Shen, Pamela Robert
<b>LW4-8</b>	<b>International Approaches to Cancer Rehabilitation (Global Initiative/Rehabilitation 2030) in the Long Workshop Cancer Rehabilitation: Global Perspectives for the Delivery of Care</b> <i>Christina M Brito</i> [Brazil]

09:00–13:00

Room 9

**Long Workshop 5: Rehabilitation Needs and Strategies for Health and Function Preservation in Adults Aging with Cerebral Palsy**Chairs: **Moon Suk Bang** [South Korea]**Mark Peterson** [United States]

<b>LW5-1</b>	<b>Noncommunicable Disease Including Mental Health Outcomes in Adults with CP from the United States</b> <i>Mark D. Peterson</i> [United States]
<b>LW5-2</b>	<b>Cardiovascular Disease in Adults with Cerebral Palsy in the United Kingdom</b> <i>Jennifer M Ryan</i> [Ireland]

<b>LW5-3</b>	<b>Understanding Modifiable Risk Factors for Cardiovascular Disease and Multimorbidity Risk in Adults with Cerebral Palsy</b> Patrick G McPhee [Canada]
<b>LW5-4</b>	<b>General Health Status and Unmet Rehabilitation Needs in Adults with CP in South Korea</b> Se Hee Jung [South Korea]
<b>LW5-5</b>	<b>Special Issues in Adults with Cerebral Palsy: Myeloradiculopathy, Cervical Dystonia and Unrevealed Swallowing Problems</b> You Gyoung Yi [South Korea], Moon Suk Bang, Hyung-Ik Shin

09:00–13:00

**Room 10**

**Long Workshop 7: Super Aged Community: Role for Community Based and Primary Rehabilitation Care**

Chairs: Shigeo Takizawa [Japan]  
Yoshiko Morita [Japan]  
Walter R Frontera [United States]

<b>LW7-1</b>	<b>Which Community-Primary Rehabilitation in Developing and Developed Countries?</b> Alessandro Giustini [Italy]
<b>LW7-2</b>	<b>Physical Activity in the Elderly: A Novel Approach Rehabilitation Field and Adapted Physical Activity</b> Rosa Grazia Bellomo [Italy]
<b>LW7-3</b>	<b>Cancer Survivor in Super Aged Community: Rde for Community Bused and Primary Rehabilitation Care</b> Raoul Saggini [Italy]
<b>LW7-4</b>	<b>Community Biophilia Rehabilitation Network for the Disabled Elderly</b> Yoshiko Morita [Japan], Shigeo Takizawa, Rika Wada
<b>LW7-5</b>	<b>Economic Sustainability in the Super-Aged Society through a Specific and Efficient Rehabilitation</b> Shigeo Takizawa [Japan]
<b>LW7-6</b>	<b>Assessment of Brain Activation at Motivative Exercise Using fNIRS and fMRI</b> Toshiyuki Tanaka [Japan]

09:00–13:00

**Room 11**

**Long Workshop 9: Dysphagia Rehabilitation: Pathophysiology, Evaluation, and Treatment (level 1)**

Chairs: Eric Verin [France]  
Yoko Inamoto [Japan]

<b>LW9-1</b>	<b>Dysphagia Overview</b> Hitoshi Kagaya [Japan]
--------------	---

<b>LW9-2</b>	<b>Swallowing Physiology</b> Marlís González Fernández <i>[United States]</i>
<b>LW9-3</b>	<b>Neurophysiology</b> Eric Verin <i>[France]</i>
<b>LW9-4</b>	<b>Clinical Assessment</b> Marlís González Fernández <i>[United States]</i>
<b>LW9-5</b>	<b>Videofluoroscopic Evaluation of Swallowing</b> Masako Fujii-Kurachi <i>[Japan]</i>
<b>LW9-6</b>	<b>Fiberoptic Endoscopic Evaluation of Swallowing</b> Koichiro Matsuo <i>[Japan]</i>
<b>LW9-7</b>	<b>Swallowing CT</b> Yoko Inamoto <i>[Japan]</i>
<b>LW9-8</b>	<b>High Resolution Manometry</b> Yoichiro Aoyagi <i>[Japan]</i>
<b>LW9-9</b>	<b>Exercise Based on Motor Learning</b> Yoko Inamoto <i>[Japan]</i>
<b>LW9-10</b>	<b>Respiratory Intervention</b> Eric Verin <i>[France]</i>
<b>LW9-11</b>	<b>Neurorehabilitation, Central and Peripheral Strategies</b> Byung-Mo Oh <i>[South Korea]</i>

14:00–18:00

Room 6

**Long Workshop 2: Musculoskeletal Ultrasound: Lower Limb**Chair: Amit Bhargava *[United States]*

<b>LW2-1</b>	<b>TBD</b> Mark Hurdle <i>[United States]</i>
<b>LW2-2</b>	<b>Musculoskeletal Ultrasound: Lower Limb</b> Amit Bhargava <i>[United States]</i>
<b>LW2-3</b>	<b>TCT Novy from Indonesia</b> A Jason De Luigi <i>[United States]</i>
<b>LW2-4</b>	<b>Lower Limb Ultrasound Workshop</b> Navita Purohit <i>[India]</i>
<b>LW2-5</b>	<b>Lower Limb Ultrasound Workshop</b> Tct Novy <i>[Indonesia]</i>

**Long Workshop 6: What PRM Physicians Need to Know About the ICF**

Chairs: Masahiko Mukaino [Japan]

Gerold Stucki [Switzerland]

<b>LW6-1</b>	<b>General Concept of System-Wide Implementation of the ICF in Rehabilitation</b> Gerold Hans Stucki [Switzerland]
<b>LW6-2</b>	<b>Fundamentals of the ICF - A Refresher</b> Melissa Selb [Switzerland]
<b>LW6-3</b>	<b>Introduction of Current Ongoing Projects</b> Masahiko Mukaino [Japan], Gerold Hans Stucki, Carlotte Kiekens, Julia Patrick Engkasan, Melissa Selb
<b>LW6-4</b>	<b>ClinFIT-An Emerging ISPRM Clinical Functioning Information Tool: Brief Introduction</b> Gerold Hans Stucki [Switzerland]
<b>LW6-5</b>	<b>ConFIT-An Emerging ISPRM Clinical Functioning Information Tool: European Experience</b> Carlotte Kiekens [Belgium]
<b>LW6-6</b>	<b>ConFIT-An Emerging ISPRM Clinical Functioning Information Tool: Malaysian Experience</b> Julia Patrick Engkasan [Malaysia]
<b>LW6-7</b>	<b>ConFIT-An Emerging ISPRM Clinical Functioning Information Tool: Japanese Experience</b> Masahiko Mukaino [Japan]
<b>LW6-8</b>	<b>Individual Rehabilitation Plan (IRP); A Patient-Centred Application of the ICF Based on the Rehab-Cycle</b> Mauro Zampolini [Italy]
<b>LW6-9</b>	<b>Clinical Quality Management for Rehabilitation (CQM-R): Brief Introduction</b> Gerold Hans Stucki [Switzerland]
<b>LW6-10</b>	<b>Clinical Quality Management for Rehabilitation (CQM-R): Japanese Model</b> Masahiko Mukaino [Japan]
<b>LW6-11</b>	<b>Clinical Quality Management for Rehabilitation (CQM-R): Malaysian Model</b> Julia Patrick Engkasan [Malaysia]
<b>LW6-12</b>	<b>Clinical Quality Management for Rehabilitation (CQM-R): European Model</b> Melissa Selb [Switzerland]
<b>LW6-13</b>	<b>Bridging Individual Data from Clinical Practice with CQM-R</b> Masahiko Mukaino [Japan]
<b>LW6-14</b>	<b>Opportunity of ICF Implementation (Call for Action)</b> Gerold Hans Stucki [Switzerland]

14:00–18:00

Room 10

### Long Workshop 8: Constraint-Induced Movement Therapy: An Efficacious Form of Upper-Extremity Neurorehabilitation

Chairs: **Kazuhisa Domen** [Japan]  
**Kayoko Takahashi** [Japan]

<b>LW8-1</b>	<b>Constraint-Induced Movement Therapy</b> Gitendra Uswatte [United States]
<b>LW8-2</b>	<b>Botulinum Toxin Therapy, Robotic Therapy</b> Yuki Uchiyama [Japan], Kazuhisa Domen, Kayoko Takahashi, Gitendra Uswatte, Takashi Takebayashi, Satoru Amano
<b>LW8-3</b>	<b>Behavioural Change: Theories and Applications</b> Kayoko Takahashi [Japan]
<b>LW8-4</b>	<b>Therapeutic Synergism in the Combination of Modalities</b> Takashi Takebayashi [Japan]
<b>LW8-5</b>	<b>Functional Assessment for Upper Extremity</b> Satoru Amano [Japan]

14:00–18:00

Room 11

### Long Workshop 10: Dysphagia Rehabilitation: Pathophysiology, Evaluation, and Treatment (level 2)

Chairs: **Eric Verin** [France]  
**Yoko Inamoto** [Japan]  
 Facilitators: **Hitoshi Kagaya** [Japan], **Yoichiro Aoyagi** [Japan], **Seiko Shibata** [Japan],  
**Yoko Inamoto** [Japan], **Eric Verin** [France], **Byung-Mo Oh** [South Korea],  
**Marlís González Fernández** [United States], **Koichiro Matsuo** [Japan],  
**Masako Fujii-Kurachi** [Japan]

<b>LW10-1</b>	<b>Dysphagia Overview</b> Hitoshi Kagaya [Japan]
<b>LW10-2</b>	<b>Detection of Penetration, Aspiration, and Residue</b> Hitoshi Kagaya [Japan], Yoichiro Aoyagi [Japan], Seiko Shibata [Japan], Yoko Inamoto [Japan], Eric Verin [France], Byung-Mo Oh [South Korea], Marlís González Fernández [United States], Koichiro Matsuo [Japan], Masako Fujii-Kurachi [Japan]
<b>LW10-3</b>	<b>Evaluation of Dysphagia Severity</b> Hitoshi Kagaya [Japan], Yoichiro Aoyagi [Japan], Seiko Shibata [Japan], Yoko Inamoto [Japan], Eric Verin [France], Byung-Mo Oh [South Korea], Marlís González Fernández [United States], Koichiro Matsuo [Japan], Masako Fujii-Kurachi [Japan]
<b>LW10-4</b>	<b>Demonstration of Fiberoptic Endoscopic Evaluation of Swallowing</b> Koichiro Matsuo [Japan]

**LW10-5 Planning a Treatment Based on Evaluation -Case Study**

[Hitoshi Kagaya](#) [*Japan*], [Yoichiro Aoyagi](#) [*Japan*], [Seiko Shibata](#) [*Japan*], [Yoko Inamoto](#) [*Japan*],  
[Eric Verin](#) [*France*], [Byung-Mo Oh](#) [*South Korea*], [Marlís González Fernández](#) [*United States*],  
[Koichiro Matsuo](#) [*Japan*], [Masako Fujii-Kurachi](#) [*Japan*]

# Scientific Program

Day 1 — Monday, June 10, 2019

08:00–09:00

Room 2

## Short Workshop 1: Comparing and Contrasting East and West Robotics Utilization in Acute Inpatient Neurorehabilitation

Chair: [Alberto Esquenazi](#) [United States]

- |              |  |
|--------------|--|
| <b>SW1-1</b> | <b>Development of Disability-Oriented Exercise Assist Robots -Welwalk and BEAR-</b><br><a href="#">Satoshi Hirano</a> [Japan]  |
| <b>SW1-2</b> | <b>TBD</b><br><a href="#">Gerard E. Francisco</a> [United States]  |
| <b>SW1-3</b> | <b>Cybernic Treatment with the Cyborg-Type Robot Hybrid Assistive Limb Enhanced Functional Regeneration in Patients with Neuromuscular and Neurological Diseases</b><br><a href="#">Takashi Nakajima</a> [Japan] |
| <b>SW1-4</b> | <b>Comparing and Contrasting East and West Robotics Utilization in Neurorehabilitation</b><br><a href="#">Alberto Esquenazi</a> [United States]  |

08:00–09:00

Room 3

## Short Workshop 2: Rehabilitation for Motor Impairments in People with Parkinson's Disease

Chair: [Nam-Jong Paik](#) [South Korea]

- |              |   |
|--------------|---|
| <b>SW2-1</b> | <b>Therapeutic Exercise for Motor and Cognitive Impairments in Parkinson's Disease</b><br><a href="#">Se Hee Jung</a> [South Korea] |
| <b>SW2-2</b> | <b>Effect and Mechanism of Robot-Assisted Gait Training in Parkinson's Disease</b><br><a href="#">Han Gil Seo</a> [South Korea]     |
| <b>SW2-3</b> | <b>Gait Training Using Virtual Reality: Things to be Considered</b><br><a href="#">Won-Seok Kim</a> [South Korea]                   |



---

08:00–09:00

**Room 4**

**Short Workshop 3: Finding the Right Balance of Workload to Optimize Sports Performance and Reduce Injury**

Chair: **Jason L Zaremski** [*United States*]

- |              |  |
|--------------|--|
| <b>SW3-1</b> | <b>Finding the Right Balance of Workload to Optimize Sports Performance and Reduce Injury</b><br><a href="#">Jason L Zaremski</a> [ <i>United States</i> ], Kevin R Vincent, Gerardo E Miranda-Comas, William F Micheo |
| <b>SW3-2</b> | <b>Does One Size Really Fit All? Evaluation of the 10% Rule and Stress Fracture Risk in Runners</b><br><a href="#">Kevin R Vincent</a> [ <i>United States</i> ]  |
| <b>SW3-3</b> | <b>The Adolescent Athlete: Finding the Right Mix of Workload and Rest for Maximal Performance</b><br><a href="#">Gerardo E Miranda-Comas</a> [ <i>United States</i> ]  |
| <b>SW3-4</b> | <b>Designing the Optimal Sports Medicine Rehabilitation Program: Does Level of Competition Affect Your Prescription?</b><br><a href="#">William F Micheo</a> [ <i>Puerto Rico</i> ]                                    |

---

08:00–09:00

**Room 5**

**Short Workshop 4: Cochrane Rehabilitation Workshop: Apply CochRane Evidence with Confidence (ACREC)**

Chair: **Julia Patrick Engkasan** [*Malaysia*]

- |              |  |
|--------------|--|
| <b>SW4-1</b> | <b>Introduction to Evidence Based Medicine</b><br><a href="#">Julia Patrick Engkasan</a> [ <i>Malaysia</i> ], Farooq A Rathore, Frane Grubisic |
| <b>SW4-2</b> | <b>Systematic Reviews - How to Read and Understand Them</b><br><a href="#">Frane Grubisic</a> [ <i>Croatia</i> ]                               |
| <b>SW4-3</b> | <b>Critical Appraisal of Systematic Reviews</b><br><a href="#">Farooq A Rathore</a> [ <i>Pakistan</i> ]  |

---

08:00–09:00

**Room 6**

**Short Workshop 5: InSCI and the Learning Health System: Implementing the Results of the Multi-Country InSCI Survey**

Chairs: **Jerome Bickenbach** [*Switzerland*]

**Gerold Stucki** [*Switzerland*]

- |              |  |
|--------------|--|
| <b>SW5-1</b> | <b>The Leaning Health System and the INSCI Survey</b><br><a href="#">Gerold Hans Stucki</a> [ <i>Switzerland</i> ], <a href="#">Jerome Bickenbach</a> [ <i>Switzerland</i> ] |
|--------------|--|

**SW5-2**      **The International Classification of Service Organization in Rehabilitation (ICSO-R) 2.0**  
 Christoph Gutenbrunner [Germany], Carlotte Kiekens, Francesca Gimigliano, Thorsten Meyer,  
 Boya Nugraha

**SW5-3**      **Implementation of International Spinal Cord Injury (InSCI) Results in Australia**  
 James W Middleton [Australia], Mohit Arora, Tim Geraghty, Ruth Marshall, Andrew Nunn

**SW5-4**      **Implementation of InSCI Results in Malaysia**  
 Nazirah Hasnan [Malaysia]

08:00–09:00

Room 7

### Freepapers 1: Pediatrics

Chairs: Nobuhiko Haga [Japan]

Dmitry V Skvortsov [Russia]

**01-1**  
 08:00      **Pain Reported by People with Cerebral Palsy and Families: ESPaCe, a National Survey on Motor Rehabilitation in France**  
 Javier De La Cruz [Spain], Gwenael Corneic, Gaelle Drewnowski, Julia Boivin, Philippe Toulet,  
 Isabelle Desguerre, Audrey Fontaine, Vincent Gautheron, Yann Le Lay, Anne-Catherine Guenier,  
 Eric Berard, Maria Bodoria, Sylvain Brochard

**01-2**  
 08:10      **Pain in Adults with Cerebral Palsy: A Systematic Review and Meta-analysis**  
 Wilma MA Van Der Slot [Netherlands], Joyce L. Benner, Grigoriou Papageorgiou, Prue Morgan,  
 Marij E Roebroek, Pain Review Group

**01-3**  
 08:20      **Postural Balance at Children Survived after Posterior Fossa Tumor, Acute Lymphoblastic Leukemia and Hematopoietic Stem Cell Transplantation**  
 Dmitry V Skvortsov [Russia], Vladimir N. Kasatkin, Serafima M Chechelnitskaya, Daria V ZHuk,  
 Alexander F Karelin

**01-4**  
 08:30      **Contribution of Rehabilitation Medicine to Patients with Typical Form of Fibrodysplasia Ossificans Progressiva**  
 Nobuhiko Haga [Japan], Yusuke Shinoda, Sayaka Fujiwara, Ryoko Sawada, Hiroshi Mano

**01-5**  
 08:40      **The Using of Music as Complementary Rehabilitation for Children with Autism Spectrum Disorder**  
 Erayanti Saloko [Japan], Erna Ariyanti Kurnianingsih, Samuel Cahyo Sembodo, Yuko Ito,  
 Ryuji Kobayashi

**01-6**  
 08:50      **Scalp Acupuncture Combined with TEACCH to Treat Children with Autism**  
 Qinliang Zhang [China], Jun Zhang, Zhenwei Zhou, Fenglin Liu, Liyan Tian

**Freepapers 5: Neuromodulation I**Chairs: **Pablo A. Celnik** [United States]**Wataru Kakuda** [Japan]

<b>05-1</b> 08:00	<b>The Effect of High Frequency rTMS on Cognitive Impairment in Patients with Stroke and Modulation of Amplitude of Low Frequency Fluctuation and Functional Connectivity</b> <a href="#">Mingyu Yin</a> [China], Xi-Quan Hu
<b>05-2</b> 08:10	<b>The Effects of Repetitive Transcranial Magnetic Stimulation on Neuropathic Pain after Spinal Cord Injury: An fNIRS Study</b> <a href="#">Xiaolong Sun</a> [China], Chen-Guang Zhao, Xiang Mou, Hua Yuan
<b>05-3</b> 08:20	<b>Is the Efficacy of Repetitive Transcranial Magnetic Stimulation Influenced by Baseline Severity of Fatigue Symptom in Patients with Myalgic Encephalomyelitis</b> <a href="#">De Gang Yang</a> [Japan], Rui Gu, Wataru Kakuda
<b>05-4</b> 08:30	<b>Therapeutic Mechanisms of Repetitive Transcranial Magnetic Stimulation in in Vitro and in Vivo Experimental Models</b> <a href="#">Ji Seon Hong</a> [South Korea], Ji Yoon Jang, Sung Hoon Kim, Ahreum Baek, Jung Young Park
<b>05-5</b> 08:40	<b>Effectiveness of Repetitive Transcranial Magnetic Stimulation on Hand Function and Muscle Recruitment in Children with Hemiplegic Cerebral Palsy: A Randomized Controlled Trial</b> <a href="#">Lu He</a> [Indonesia], Yanfei Lu, Xiaoyue Wang, Xiaohui Hou, Xiaohua Yan, Hongmei Tang, Jinling Li, Yun Zheng, Kaishou Xu
<b>05-6</b> 08:50	<b>Enhancing Mirror Visual Feedback with Intermittent Theta Burst Stimulation in Healthy Adults</b> <a href="#">Kenneth N. K. Fong</a> [Hong Kong], Jack Jiaqi Zhang

**Short Workshop 6: Role of Rehabilitation for Management of Post-Polio Syndrome**Chairs: **Satoru Saeki** [Japan]**Nigel Quadros** [Australia]

<b>SW6-1</b>	<b>Overwork Weakness in Post-Polio Syndrome</b> <a href="#">Satoru Saeki</a> [Japan], Yasuyuki Matsushima, Akiko Hachisuka
<b>SW6-2</b>	<b>Screening for Sarcopenia in Ageing Polio Survivors in South Australia</b> <a href="#">Nigel Quadros</a> [Australia], Kandiah Umaphysivam
<b>SW6-3</b>	<b>Appropriate Follow-Up with Comprehensive Medical Check-Up for Polio Survivors</b> <a href="#">Koshiro Sawada</a> [Japan], Daisuke Imoto, Yasuo Mikami, Eiichi Saitoh

08:00–09:00

Room 11

**Short Workshop 12: Radiation Free Interventions in Physical & Rehabilitation Medicine**Chairs: **Abhishek Srivastava** [India]**Navita Purohit** [India]

<b>SW12-1</b>	<b>Radiation Free Interventions in Physical &amp; Rehabilitation Medicine: Spine Interventions</b> <b>Navita Purohit</b> [India]
<b>SW12-2</b>	<b>Radiation Free Interventions in Physical &amp; Rehabilitation Medicine: Muscle Interventions</b> <b>Abhishek Srivastava</b> [India], Navita Purohit, Amit Bhargava
<b>SW12-3</b>	<b>Joint Interventions</b> <b>Amit Bhargava</b> [United States]

09:15–09:45

Room 1

**Keynote Lecture 1: Multimodal Neurorehabilitation for Upper Limb Paralysis**Chair: **Naoichi Chino** [Japan]

<b>KL1-1</b>	<b>Multimodal Neurorehabilitation for Upper Limb Paralysis</b> <b>Kazuhisa Domen</b> [Japan], Yuki Uchiyama
--------------	--

09:45–10:15

Room 1

**Keynote Lecture 2: Neuromodulation to Augment Post-stroke Motor Recovery: Vagus Nerve Stimulation Paired with Rehabilitation**Chair: **Shigeru Sonoda** [Japan]

<b>KL2-1</b>	<b>Neuromodulation to Augment Post-stroke Motor Recovery: Vagus Nerve Stimulation Paired with Rehabilitation</b> <b>Gerard E. Francisco</b> [United States]
--------------	--

10:30–12:00

Room 2

**Special Session 1: State of the Art in the Rehabilitation of Persons with LL Amputation: from Evaluation to Prescription and the Impact of Biomechanics**Chair: **Carolina Schiappacasse** [Argentina]

<b>SS1-1</b> 10:30	<b>Levels of Amputation and Prescription</b> <b>Carolina Schiappacasse</b> [Argentina]
<b>SS1-2</b> 10:52	<b>Prosthetic Alignment</b> <b>Maria Jose Espinoza Velasco</b> [Chile]
<b>SS1-3</b> 11:14	<b>Prosthetic Training</b> <b>Pamela Molina Urra</b> [Chile]

**SS1-4**      **Analysis of Prosthetic Gait**  
11:36      [Alberto Esquenazi](#) [United States]

10:30–12:00

**Room 3**

**Special Session 4: Brain Neuromodulation to Induce Brain Plasticity and Motor Learning**

Chairs: [Nam-Jong Paik](#) [South Korea]

[Pablo A. Celnik](#) [United States]

**SS4-1**      **Brain Stimulation for Motor Learning and Memory Formation**  
10:30      [Pablo A. Celnik](#) [United States]

**SS4-2**      **Brain Neuromodulation to Induce Brain Plasticity and Motor Learning**  
10:52      [Nam-Jong Paik](#) [South Korea], [Pablo A. Celnik](#), [Masahiro Abo](#)

**SS4-3**      **Brain Stimulation for Post-Stroke Aphasia**  
11:14      [Masahiro Abo](#) [Japan]

**SS4-4**      **Transcranial Direct Current Stimulation Combined with Robotic Training in Incomplete Spinal Cord Injury: A Randomized, Sham-Controlled Clinical Trial**  
11:36      [Marcel Simis](#) [Brazil]

10:30–12:00

**Room 4**

**Special Session 7: Innovations of Care in Rehabilitation of Medically Complex Patients**

Chair: [Carmen M Terzic](#) [United States]

**SS7-1**      **Rehabilitation of Medically Complex Patients**  
10:30      [Carmen M Terzic](#) [United States]

**SS7-2**      **Innovations of Care in Rehabilitation of Medically Complex Patients: Innovations in Gait Rehabilitation**  
10:40      [Anne-Felicia Ambrose](#) [United States]

**SS7-3**      **The Frail Patient: Evaluation and Outcomes**  
11:00      [Marta Supervia](#) [Spain]

**SS7-4**      **Rehabilitation of Complex Cardiac Patients**  
11:20      [Milica Lazovic](#) [Serbia]

**SS7-5**      **Investigating a Comprehensive Stroke Recovery Program Utilizing Interval Cardiac Rehabilitation**  
11:40      [Sara J. Cuccurullo](#) [United States], [Talya Fleming](#)

10:30–12:00

Room 5

**ISPRM Session 1: ISPRM WHO Liaison Committee Activities 2018-2020**Chair: **Carlotte Kiekens** [Belgium]

<b>IS1-1</b>	<b>General Report of Activities ISPRM WHO Liaison Committee</b> Carlotte Kiekens [Belgium]
<b>IS1-2</b>	<b>Report of Activities Strengthening Rehabilitation Working Group: Capacity Building</b> Christoph Gutenbrunner [Germany]
<b>IS1-3</b>	<b>ISPRM WHO-Liaison Committee Activities 2018-2020: Integration of the Rehabilitation in the Critical Role of Primary Health Care</b> Mario A. Giraldo-Prieto [Colombia], Luz Helena Lugo Agudelo
<b>IS1-4</b>	<b>Report of Activities Standardized Rehabilitation Reporting Subcommittees: ICF Implementation</b> Wouter De Groote [Belgium]
<b>IS1-5</b>	<b>ISPRM-WHO Liaison Committee Activities 2018-2020 - Update from Sub-Committee Learning Health System for Spinal Cord Injury (LHS-SCI) - A Joint Effort of ISCoS and ISPRM</b> Christine Thyrian [Switzerland]
<b>IS1-6</b>	<b>Report of Activities: International Classification of Service Organization in Rehabilitation (ICSO-R) Working Group</b> Masahiko Mukaino [Japan]

10:30–12:00

Room 6

**IISART Session: IISART Session: Opportunities and Challenges of Advanced Technologies for Healthcare Professionals and Research**Chair: **Sarah Ward** [Australia]

<b>JS1-1</b>	<b>Gait Perturbations (Mechanical and Visual) for Assessment and Training in Clinical Rehabilitation</b> Sarah Ward [Australia], Sanne Roeles, Markus M Rieger, Selma Papegaaij
<b>JS1-2</b>	<b>IISART Workshop Opportunities and Challenges of Advanced Technologies for Healthcare Professionals and Research</b> Tsz Kin Kwok [Hong Kong]

**Freepapers 2: Physical Modality**Chairs: **Chang-Hyung Lee** [South Korea]**Nobuyuki Kawate** [Japan]**Yuki Uchiyama** [Japan]

<b>02-1</b>	<b>Cancelled</b>
<b>02-2</b> 10:30	<b>Comparison of Radial Extracorporeal Shock Wave Therapy and Ultrasound-Guided Glucocorticoid Injection in Shoulder Pain: a Randomized Control Trial</b> <a href="#">Zhuangfu Wang</a> [China], Dongfeng Xie, Juanjuan He, Wei Xin, Yiyang Mai, Weijian Tang
<b>02-3</b>	<b>Cancelled</b>
<b>02-4</b> 10:40	<b>A Randomized, Double-blind, Placebo-controlled Trial of Efficacy of High Intensity Laser Therapy for Carpal Tunnel Syndrome</b> <a href="#">Chakarg Pongurgorn</a> [Thailand], Nopparat Jungjaroennorasook, Phakamas Tanvijit, Kornkamol Theeparakpun, Veeravich Phanitsupasetch
<b>02-5</b> 10:50	<b>Does LASER Effective in Treating Osteoarthritis?: An RCT study</b> <a href="#">Md. Muhibbur Rahman</a> [Bangladesh], Md. Abdus Shakoor, Md. Taslim Uddin, Akm Salek, Moniruzzaman Khan, Mohammad Moniruzzaman, Md. Moyeenuzzaman, A.B.M Zafar Sadeque, Hasan Habibur Rahman, Nadia Ferdous
<b>02-6</b> 11:00	<b>Influence of Nerve Block on Prevention Effect of Low-magnitude High-frequency Vibration on Disuse Osteoporosis</b> <a href="#">Xiaoyun Wang</a> [China], Peizhen Zhang, Dan Tang, Huijing Hu
<b>02-7</b> 11:10	<b>Nanostructured Titanium Dioxide Coating Reduces the Temperature Increment of Muscle Tissues Adjacent to Titanium Alloy Implants in Microwave Irradiation</b> <a href="#">Yuehong Bai</a> [China]
<b>02-8</b> 11:20	<b>Electroacupuncture Prevents Cartilage Degeneration and Inhibits Subchondral Bone Loss Through Immunomodulating Activation of M2 Macrophages</b> <a href="#">Jun Zhou</a> [China], Sijia Liu, Yuan Liao, Guanghua Sun, Jing Liu, Fu Luo, Qi Wu, Guijuan Zhou, Peirui Zhong, Guo Cheng, Tiantian Wang, Chenyuan Deng
<b>02-9</b> 11:30	<b>The Clinical Efficacy of Lordotic Curve-Controlled Lumbar Traction Device: Randomized Controlled Trial</b> <a href="#">Chang-Hyung Lee</a> [South Korea], Sung-Jin Heo

**Freepapers 6: Neuromodulation II**Chairs: **Satoru Saeki** [Japan]**Kenneth Fong** [Hong Kong]**Katsuhiko Mizuno** [Japan]

<b>06-1</b> 10:30	<b>Transcranial Direct Current Stimulation (tDCS) for the Treatment of Hemispatial Neglect Clinical Studies</b> <a href="#">Jiayi Xia</a> [China], Chun Lei Shan, Qian Xu, Zhu Chen, Qian Zhang, Ping Wang, Yun Jia, Yao Lu, Yi Yi Chen, Xuemei Qiu, Xiao Wen Dai, Yanqin Gu
<b>06-2</b> 10:40	<b>Functional Network Topological Alteration of Primary Motor Cortex after Transcranial Direct Current Stimulation in Patients with Incomplete Spinal Cord Injury</b> <a href="#">Yu Pan</a> [China], Wei Bei Dou, Yun Xiang Ge, Qiong Wu, Quan Xu
<b>06-3</b> 10:50	<b>tDCS Effect on Movement Coordination in a Grasping and Lifting Task in Sub Acute Stroke patients</b> <a href="#">Justine Lowenthal-Raz</a> [Israel], Nachum Soroker, Dario G Liebermann, Jason Friedman
<b>06-4</b> 11:00	<b>Effects of Transcranial Direct Current Stimulation Combined with Melodic Intonation Therapy Treatment on Picture Naming in Non-fluent Aphasia</b> <a href="#">Zhang Qian</a> [China], Xu Qian, Chen Zhu, Wang Ping, Lu Yao, Chen Yunjia, Xia Jiayi, Qiu Xuemei, Gu Yanqin, Chen Yiyi, Dai Xiaowen, Shan Chunlei
<b>06-5</b>	Cancelled
<b>06-6</b> 11:10	<b>Is the Efficacy of Neuromuscular Electrical Stimulation Influenced by Baseline Severity of Hemiparesis in Stroke Patients?</b> <a href="#">Shin Sato</a> [Japan], Mitsuhiro Sano, Chiharu Yashima, Junichi Eguchi, Takeki Ishida, Fei Zhung, Takamasa Kitahara, Risa Kiko, Wataru Kakuda
<b>06-7</b> 11:20	<b>Exploration of Motor Function and Brain Computer Interface (BCI) Accuracy in Stroke Patients with Hand Dysfunction</b> <a href="#">Shugeng Chen</a> [China], Jie Jia, Xiaokang Shu
<b>06-8</b> 11:30	<b>Motor and Nonmotor Related Brain Network Alternation after BCI in Stroke Patient</b> <a href="#">Qiong Wu</a> [China], Yu Pan, Weipei Dou, Gang Liu, Yueheng Wang, Bo Chen, Di Ma, Hang Yin, Hongliang Zhao
<b>06-9</b> 11:40	<b>Effects of Brain-Computer Interface Rehabilitation Robot Based on Steady-State Motion Visual Evoked Potential on Neurological Function Recovery after Stroke</b> <a href="#">Chen-Guang Zhao</a> [China], Hua Yuan, Xiang Mou



---

10:30–11:30

Room 10

**Short Workshop 7: Smart Care System Based on ICT and Robotics from Hospital to Home**

Chairs: Satoshi Hirano [Japan]  
Sungchul Kang [South Korea]

<b>SW7-1</b>	<b>Clinical Application of Care Robot System for Inpatient Care</b> Jae-Young Lim [South Korea], Jae-Yon Lee
<b>SW7-2</b>	<b>Modular and Affordable Power Assist Module for Various Physical Care Services</b> Sungchul Kang [South Korea], Seung-Won Kim, Woo-Sub Lee
<b>SW7-3</b>	<b>Robotic Smart Home for the Elderly and People with Disabilities</b> Shigeo Tanabe [Japan]

---

10:30–11:30

Room 11

**Short Workshop 13: New Biomarkers for Functional Recovery after Stroke**

Chair: Ichiro Miyai [Japan]

<b>SW13-1</b>	<b>Synergy Patterns of Paretic Limb as a Biomarker for Functional Recovery after Stroke</b> Qi An [Japan], Ningjia Yang, Hiroki Kogami, Shingo Shimoda, Hiroshi Yamakawa, Yusuke Tamura, Hiroshi Yamasaki, Matti Itkonen, Fady S Alnajjar, Makoto Kinomoto, Kouji Takahashi, Takanori Fujii, Hironori Otomune, Noriaki Hattori, Atsushi Yamashita, Ichiro Miyai, Hajime Asama
<b>SW13-2</b>	<b>Phase Synchrony Index as a Biomarker for Functional Recovery after Stroke</b> Teiji Kawano [Japan], Noriaki Hattori, Yutaka Uno, Megumi Hatakenaka, Hajime Yagura, Hiroaki Fujimoto, Tomomi Yoshioka, Michiko Nagasaki, Hironori Otomune, Hideki Mochizuki, Keiichi Kitajo, Ichiro Miyai

---

11:30–12:30

Room 10

**Short Workshop 8: Setting Meaningful Goals in Rehabilitation; a Multidisciplinary Approach Involving Chaplaincy**

Chair: Joost Dekker [Netherlands]

<b>SW8-1</b>	<b>Setting Meaningful Goals in Rehabilitation</b> Joost Dekker [Netherlands]
<b>SW8-2</b>	<b>Global Meaning in People with Spinal Cord Injury or Stroke: Content, Changes and Perceived Influence on Rehabilitation</b> Elsbeth Littooi [Netherlands]
<b>SW8-3</b>	<b>Meaningfull Goals in Rehabilitation</b> Suzan Doodeman [Netherlands]
<b>SW8-4</b>	<b>Working with Meaningful Goals in a Multidisciplinary Rehabilitation Setting</b> Onno Manck [Netherlands]

11:30–12:30

Room 11

### Short Workshop 14: The International Spinal Cord Injury (InSCI) Community Survey: A study in 20+ Countries across the Globe

Chair: **Marcel W.M. Post** [*Netherlands*]

**SW14-1** The International Spinal Cord Injury (InSCI) Community Survey: Study Design and Procedures

[Mirja H. Gross-Hemmi](#) [*Switzerland*]

**SW14-2** Response, Representativeness and Characteristics of InSCI Participants

[Christine Fekete](#) [*Switzerland*]

**SW14-3** Participation in Paid Work among People with SCI Across Countries

[Marcel W. Post](#) [*Netherlands*]

**SW14-4** Prevalence of Environmental Barriers Across InSCI Countries

[Jan D. Reinhardt](#) [*China*]

12:50–13:50

Room 2

### Luncheon Seminar 1: Role of Exercise, Braces, and Pharmacotherapy for Treatment of Early Knee Osteoarthritis

Sponsor: **Pacific Supply Co.,Ltd.**

Chair: **Shuichi Matsuda** [*Japan*]

**LS1-1** Role of Exercise, Braces, and Pharmacotherapy for Treatment of Early Knee Osteoarthritis

[Atsuya Watanabe](#) [*Japan*]

12:50–13:50

Room 3

### Luncheon Seminar 2: Community-Based Fall Prevention Program for Older Persons

Sponsor: **Inter Reha Co.,Ltd**

Chair: **Shigeru Sonoda** [*Japan*]

**LS2-1** Community-Based Fall Prevention Program for Older Persons

[Yohei Otaka](#) [*Japan*]

---

12:50–13:50

Room 4

**Luncheon Seminar 3: Advances in Swallowing Studies**  
**Three Dimensional Dynamic Analysis Using Swallowing CT**

Sponsor: **CANON MEDICAL SYSTEMS CORPORATION**

Chair: **Eiichi Saitoh** [Japan]

**LS3-1**      **Advances in Swallowing Studies**  
**Three Dimensional Dynamic Analysis Using Swallowing CT**  
**Yoko Inamoto** [Japan]

---

14:00–14:30

Room 1

**Keynote Lecture 3: Innovation Influencing Physical Medicine and Rehabilitation**

Chair: **Izumi Kondo** [Japan]

**KL3-1**      **Innovation Influencing Physical Medicine and Rehabilitation**  
**Alberto Esquenazi** [United States]

---

14:45–16:15

Room 2

**Special Session 2: Physical Activity and Participation in Children with Cerebral Palsy (CP)**

Chairs: **Heakyung Kim** [United States]

**Nobuhiko Haga** [Japan]

**SS2-1**      **Importance of Physical Activity and Participation in Children with Cerebral Palsy**  
14:45      **Nobuhiko Haga** [Japan]

**SS2-2**      **Fitness in Children with CP: Application of the Modified Naughton Protocol (Submaximal Exercise Test) in Children with Cerebral Palsy**  
15:05      **Jeong-Yi Kwon** [South Korea], **Min-Hwa Suk**, **In-Kyeong Park**

**SS2-3**      **Physical Activity in Children with CP**  
15:30      **Bo Young Hong** [South Korea], **Hyehoon Choi**, **Joon-Sung Kim**, **Seong Hoon Lim**

**SS2-4**      **Physical Activity and Participation in Children with Cerebral Palsy**  
15:55      **Heakyung Kim** [United States]

---

14:45–16:15

Room 3

**Special Session 5: Rehabilitation Issues in Neuromuscular Disease**

Chair: **Tyng-Guey Wang** [Taiwan]

**SS5-1**      **Rehabilitation Issues in Neuromuscular Disease: Evaluation and Management of Respiratory Complication**  
14:45      **Seong-Woong Kang** [South Korea]

**SS5-2 Rehabilitation Issues in Neuromuscular Disease; Overview**15:15 [Kozo Hanayama](#) [Japan]**SS5-3 Management of Dysphagia in Patients with Neuromuscular Disease**15:45 [Tyng-Guey Wang](#) [Taiwan]

14:45–16:15

Room 4

**Special Session 8: Assessment and Treatment of Post-Stroke Gait Impairment**Chairs: [Alberto Esquenazi](#) [United States][David Burke](#) [United States]**SS8-1 Robotic Assisted Gait Training in Post Stroke Gait Recovery**14:45 [Ning Cao](#) [United States]**SS8-2 Framing the Problem of Gait Dysfunction after Acquired Brain Injury**15:05 [Alberto Esquenazi](#) [United States]**SS8-3 Mechanical and Neural Constraints for Hemiplegic Gait**15:25 [Sheng Li](#) [United States], Gerard E. Francisco, Ping Zhou**SS8-4 Post Stroke Ambulation - ISPRM**15:45 [David T. Burke](#) [United States]

14:45–16:15

Room 5

**Special Session 10: Traditional Therapeutic Exercise in Rehabilitation -Utility of Mind and Body**Chairs: [Lidian Chen](#) [China][Jing Tao](#) [China]**SS10-1 Traditional Therapeutic Exercise in Rehabilitation-Utility of Mind and Body**14:45 [Lidian Chen](#) [China]**SS10-2 Effects and Mechanisms of Tai Chi on Cognitive Rehabilitation**15:07 [Jing Tao](#) [China]**SS10-3 Effects and Mechanisms of Tai Chi Therapeutic Exercise on Balance Impairments Rehabilitation**15:29 [Shanli Yang](#) [China]**SS10-4 Kinematics and Kinetics of the Lower-Limb during Tai Chi Yunshou in Knee Osteoarthritis Patients**15:51 [Xiangbin Wang](#) [China], Meijin Hou, Shengxing Fu, Feng Xiong

## ISPRM Session 2: Medical Leadership: Pearls of Wisdom from the Cutting-Edge of Psychiatric Practice

Chair: **Sam S. H. Wu** [United States]

Moderator: **Bryan J O'Young** [United States]

Panel Speakers: **Linamara R. Battistella** [Brazil], **John Chae** [United States], **Joel A DeLisa** [Mexico], **Kazuhisa Domen** [Japan], **Rochelle T. Dy** [United States], **Alberto Esquenazi** [United States], **Walter R Frontera** [United States], **Juan Manuel Guzman** [Mexico], **Christoph Gutenbrunner** [Germany], **Kurt Hoppe** [United States], **Marta Imamura** [Brazil], **Jorge Lains** [Portugal], **Jianan Li** [China], **Leonard Li** [Hong Kong], **John L. Melvin** [United States], **William F Micheo** [PuertoRico], **Eiichi Saitoh** [Japan], **Carolina Schiappacasse** [Argentina], **André Thevenon** [France]

**IS2-1** Medical Leadership: Pearls of Wisdom from the Cutting-Edge of Psychiatric Practice  
[Sam S. H. Wu](#) [United States]

## Freepapers 3: Dysphagia I

Chairs: **Seong Jae Lee** [South Korea]

**Hitoshi Kagaya** [Japan]

**Chompunut Pongakkasira** [Thailand]

**03-1** The Effect of Oval Shaped Double Balloon Dilation Therapy for Dysphagia in Lateral Medullary Infarction: A Case Report  
 14:45  
[Ryu Ishimoto](#) [Japan], Seiko Shibata, Ryoko Akahori, Keiko Aihara, Yoko Inamoto, Keiko Onogi, Yuriko Ito, Yoichiro Aoyagi, Hitoshi Kagaya, Eiichi Saitoh

**03-2** Does Severity of Dysphagia Affect 1-year Survival and Recurrence in Patients with Aspiration Pneumonia?  
 14:55  
[Fumi Toda](#) [Japan], Hitoshi Kagaya, Misa Hagino, Ayako Inaba, Saeka Ando

**03-3** Is Swallowing Function Related to ADL Level and Spatial Extent of Life Space in Patients with Respiratory Failure?  
 15:05  
[Masashi Zenta](#) [Japan], Risa Kiko, Toshie Nishikawa, Kenji Tsushima, Tomohiro Hattori, Hiroshi Maruoka, Satoshi Kido, Wataru Kakuda

**03-4** The Effect of Reclining Position on Swallowing Function in Stroke with Dysphagia  
 15:15  
[Paitoon Benjapornlert](#) [Japan], Hitoshi Kagaya, Yoko Inamoto, Eriko Mizokoshi, Seiko Shibata, Eiichi Saitoh

**03-5** Detection of Penetration/Aspiration in Videofluoroscopic Swallowing Study (VFSS) by Image Analysis with Deep Learning: A Pilot Study  
 15:25  
[Seong Jae Lee](#) [South Korea], Sang-Il Choi, Joo Young Ko, Hyunil Kim

**03-6** Oral Stereognostic Ability in Stroke Patients with Dysphagia: Investigation by Oral Stereognostic Ability Test and Videofluoroscopy of Swallowing  
 15:35  
[Mayumi Suzuki](#) [Japan], Rintaro Ohama, Michihiro Ogura, Fumio Takeda, Megumi Shimodozono

- 03-7**  
15:45  
**Successful Recovery from Severe Dysphagia in Elderly Patients of Wallenberg Syndrome by Traditional Swallowing Therapy and a New VitalStim®-combined Multiple Saliva Swallowing Practice (Vital CAMP)**  
[Mutsumi Fujii](#) [Japan], Toshiyuki Takata, Hirokazu Yamamoto, Seiko Samejima, Tetsuro Kurashina, Miki Ohgushi, Takaaki Chin
- 03-8**  
15:55  
**Clinical Characteristics and Resumption of Oral Intake in Acute Stroke Patients with the History of Nasogastric Tube Self-removal**  
[Eri Otaka](#) [Japan], Kazuyo Oguchi, Sachiyo Hota, Tomoko Kondo, Kei Yagihashi, Yohei Otaka
- 03-9**  
16:05  
**Interdisciplinary Care Team Improves Dysphagia Clinical Outcomes in Patients with Acquired Brain Injury in Rehabilitation Hospital**  
[Chompunut Pongakkasira](#) [Thailand]

14:45–16:15

Room 8

**Freepapers 7: Prosthesis & Orthosis**

Chairs: [Naoshi Ogata](#) [Japan]  
[Ji Min Song](#) [South Korea]  
[Naohisa Kikuchi](#) [Japan]

- 07-1**  
14:45  
**Effects of the Cheneau Brace on the Postural Control in Patients with Idiopathic Scoliosis Using a Platform of Static Posturography**  
[Vendelin Avinee](#) [France], Jean F Catanzariti, Martin Bussiaux, Monique Coget, Andre Thevenon
- 07-2**  
14:55  
**A Critical Evaluation of Energy Expenditure Estimates Based on Individual O<sub>2</sub> Consumption, Heart Rate Curves and Average Daily Heart Rate in Spinal Orthosis**  
[Tarit K Datta](#) [India], Hasan A Raihan, Tithee Datta
- 07-3**  
15:05  
**Brace Related Stress in Adolescents Wearing a Milwaukee Brace for Scoliosis**  
[Vahideh Moradi](#) [Iran], Taher Babaei, Ramin Kordi
- 07-4**  
15:15  
**Treating Genu Recurvatum with Ankle Foot Orthoses in Hemiparetic Stroke Patients**  
[Nadia N Zaman](#) [United States], Calvin R Chen, Anthony Oreste, Ona Bloom, Rosemary Gallagher
- 07-5**  
15:25  
**Managing Foot Drop in a Sub-saharan African Country – Case Series of the Use of a Soft Ankle Foot Orthosis**  
[Abena Y. Tannor](#) [Ghana], Andrew J Haig, William Haig
- 07-6**  
15:35  
**Cross-Sectional International Multicenter Study on Quality of Life and Reasons for Abandonment of Upper Limb Prostheses**  
[Michiro Yamamoto](#) [Japan], Kevin C Chung, Hirotaka Tanaka, Takeshi Nakamura, Jumpei Oba, Takaaki Chin, Yoshiko Tobimatsu, Hitoshi Hirata
- 07-7**  
15:45  
**Sextant of Otolith-a useful gadget for diagnosis and treatment of benign paroxysmal positional vertigo**  
[Xin-Xian Lee](#) [Taiwan], Hsin-Wei Lee, Jui-Chen Chang
- 07-8**  
15:55  
**Increased Brain White Matter Diffusivity Associated with Phantom Limb Pain**  
[Ji Min Song](#) [South Korea], Chang-Hyun Park, Cheong Hoon Seo, Kwang-Ik Jung, Woo-Kyoung Yoo, Suk Hoon Ohn

**07-9** Cancelled

14:45–15:45

**Room 9**

**Joint Session 2: Latin American Symposia I: EMG in Latin American**

Chair: **Juan Manuel Guzman** [Mexico]

**JS2-1** Single Fiber Emg and Macro Emg

**Carlos E Rangel** [Colombia]

**JS2-2** How Do We Measure? Quantification Electrodiagnosis

**Jorge E. Gutierrez** [Colombia]

**JS2-3** Anatomical Tips for the Diagnosis EMG in Radiculopathies

**Juan Manuel Guzman** [Mexico], Elva T Garcia

14:45–15:45

**Room 10**

**Short Workshop 9: The Evaluation and Management of Musculoskeletal Disorders in Cancer Patients**

Chair: **Sean Smith** [United States]

**SW9-1** The Physiatrist's Role in Addressing Cancer-Related Musculoskeletal Disorders

**Andrea L Cheville** [United States]

**SW9-2** The Evaluation and Management of Musculoskeletal Disorders in Cancer Patients: Geriatric Patients and End of Life

**Jasmine Zheng** [United States], Sean Smith, Samman Shahpar, Andrea L Cheville

**SW9-3** The Evaluation and Management of Musculoskeletal Disorders in Cancer Patients

**Samman Shahpar** [United States], Sean Smith, Andrea L Cheville, Jasmine Zheng

**SW9-4** The Evaluation and Management of Musculoskeletal Disorders in Cancer Patients

**Sean Smith** [United States], Andrea L Cheville, Samman Shahpar, Jasmine Zheng

14:45–15:45

**Room 11**

**Short Workshop 15: Regenerative Rehabilitation of the Nervous System**

Chair: **Carmen M Terzic** [United States]

**SW15-1** Regenerative Rehabilitation Medicine

**Carmen M Terzic** [United States]

**SW15-2** Cell-Based Therapy and Robotic Rehabilitation for Brain Repair after Stroke

**Matteo Caleo** [Italy]

**SW15-3 Neurophysiological Biomarkers of Recovery in Neurological Diseases**

Carmelo Chisari [Italy], Stefania Dalise, Vincenzo Spina

**SW15-4 Three-Dimensional Analysis to Evaluate Effects of Rehabilitation and Cell Therapy on Functional Motor Recovery after Peripheral Nerve Injury in Rodents**

Akira Ito [Japan], Tomoki Aoyama, Junichi Tajino, Hiroshi Kuroki

15:45–16:45

Room 10

**Short Workshop 10: Promoting Plasticity. New Frontiers of Functional Surgery for Spasticity Treatments from Miniinvasive Procedures to Selective Surgical Techniques**

Chairs: Paul J Winston [Canada]

Francois Genet [France]

**SW10-1 TBD**

Djamel Bensmail [France]

**SW10-2 Cryoneurotomy for Spasticity An Innovated Use of an Established Tool**

Paul J Winston [Canada]

**SW10-3 Surgical Microfascicular Neurectomy in the Upper Extremity for the Treatment of Spasticity**

Emily Krauss [Canada]

**SW10-4 Minimally Invasive Ultrasound-Guided Laser Surgery for Spasticity Treatment in Patients with Upper Motor Neuron Syndrome: A New Approach in Interventional Physiatry**

Franco Molteni [Italy], Giulio Gasperini, Nico Farina, Alessandro Specchia, Giovanni Cannaviello, Alberto Martegani

**SW10-5 TBD**

Francois Genet [France]

15:45–16:45

Room 11

**Short Workshop 16: Pediatric Pulmonary Rehabilitation: How Different from Adults?**

Chairs: Gulseren Akyuz [Turkey]

Evrin Karadag-Saygi [Turkey]

**SW16-1 Principles of Pulmonary Rehabilitation and Differences between Pediatric and Adult Patients**

Evrin Karadag-Saygi [Turkey]

**SW16-2 Pediatric Pulmonary Rehabilitation: How Different from Adults? - Cystic Fibrosis as a Key Lung Disease of Pulmonary Rehabilitation**

Ozge Kenis-Coskun [Turkey]

**SW16-3 Pediatric Pulmonary Rehabilitation: How Different from Adults - Conventional Exercises vs Devices and Technological Interventions**

Yeliz Bahar-Özdemir [Turkey]



16:00–18:00

Room 9

### Joint Session 3: Latin American Symposia II

Chair: Juan Manuel Guzman [Mexico]

#### 1) Rehabilitation in Latin American Update

<b>JS3-1</b>	<b>Labor Inclusion of People with Disabilities in Chile</b> Carolina Schiappacasse [Argentina]
<b>JS3-2</b>	<b>Labor Inclusion of People with Disabilities in Chile</b> Ana Patricia Vergara [Chile]
<b>JS3-3</b>	<b>Acupuncture Based on Palpation: An Approach to Physical Medicine and Rehabilitation to Treat and Understand Pain and Musculoskeletal Dysfunction (MSK)</b> Roberto C. De La Torre [Peru]

#### 2) Rehabilitation in Latin American

<b>JS3-4</b>	<b>Rehabilitation in the Older Runner with Knee Osteoarthritis</b> Brenda Castillo [United States]
<b>JS3-5</b>	<b>Perturbation Training for Trunk Stabilization</b> Flavia E. Bayron [Puerto Rico]
<b>JS3-6</b>	<b>New Clinical Management for Distal-Radius Fracture: Hand Therapy Approach</b> Nelson Colon [Puerto Rico]

16:30–18:00

Room 2

### Special Session 3: Open Access: How It Got to Where It is, How to Use It Successfully, and What to Avoid

Chairs: Jeffrey R Basford [United States]

Walter R Frontera [United States]

<b>SS3-1</b> 16:30	<b>Current Status of Open Access</b> Leighton Chan [United States]
<b>SS3-2</b> 16:48	<b>Disasters and Refugees - A Swedish Perspective</b> Katharina S Sunnerhagen [Sweden]
<b>SS3-3</b> 17:06	<b>The Good, the Bad, and the Ugly of Open Access Publication</b> Gerard E. Francisco [United States]
<b>SS3-4</b> 17:24	<b>Open Access: How It Got to Where It is, How to Use It, and What to Avoid</b> Jeffrey R Basford [United States], Walter E Frontera Roura, Leighton Chan, Katharina S Sunnerhagen, Gerard E. Francisco

**SS3-5** Distinctions and Similarities of Open Access with Traditional Publishing  
17:42 [Walter R Frontera](#) [United States]

16:30–18:00

**Room 3**

**Special Session 6: Neuroplasticity, Exercise and Parkinson Disease: from Bench Research to Clinical Application**

Chair: [Mark A Hirsch](#) [United States]

**SS6-1** Neuroplasticity, Exercise and Parkinson Disease: from Bench Research to Clinical Application  
16:30 [Mark A. Hirsch](#) [United States], Vu QC Nguyen, Sanjay S Iyer

**SS6-2** Neuroplasticity, Exercise and Parkinson Disease: from Bench Research to Clinical Application  
17:00 [Mark A. Hirsch](#) [United States], Vu QC Nguyen, Sanjay S Iyer

**SS6-3** Neuroplasticity, Exercise and Parkinson Disease: from Bench Research to Clinical Application  
17:30 [Vu Nguyen](#) [United States], [Mark A. Hirsch](#)

16:30–18:00

**Room 4**

**Special Session 9: Innovative Cancer Care Continuum Integrating Technology and Rehabilitation**

Chair: [Ji Hye Hwang](#) [South Korea]

**SS9-1** Concept of Cancer Rehabilitation Strategies through Care Continuum Using Technology  
16:30 [Eun Joo Yang](#) [South Korea]

**SS9-2** Innovative Cancer Care Continuum Integrating Technology and Rehabilitation: 2. Smart after-Care Service for Breast and Colon Cancer Using mHealth, and Future Planning  
17:00 [Ji Hye Hwang](#) [South Korea]

**SS9-3** Practical Tip for Increasing Physical Performance of Prostate Cancer Survivors by Innovative Technology  
17:30 [Jong In Lee](#) [South Korea]

16:30–18:00

**Room 5**

**Special Session 11: Muscle Changes in Spasticity and Stiffness**

Chair: [Antonio Raghavan](#) [United States]

**SS11-1** Role of Extracellular Matrix of Muscle in Stiffness and Spasticity  
16:30 [Antonio Raghavan](#) [United States]

**SS11-2** Clinical Reasoning for Hyaluronidase Injection  
17:10 [Preeti Stecco](#) [United States]

**Freepapers 4: Exercise and Fall**Chairs: **Alain Pierre Yelnik** [France]**Marco YC Pang** [Hong Kong]**Junko Fujitani** [Japan]

<b>04-1</b> 16:30	<b>Effects of Long-term Exercise on Liver Cyst Formation and Fibrosis in Polycystic Liver Disease Model Rats</b> <a href="#">Yoichi Sato</a> [Japan], Takahiro Miura, Jiahe Qiu, Masahiro Kohzuki, Osamu Ito
<b>04-2</b> 16:40	<b>Diagonal Aligning Sitting Training on Tilted Surface to Backward and Paretic Side Improve Trunk Performance in Acute Stroke: A Randomized Controlled Trial</b> <a href="#">Kazuhiro Fukata</a> [Japan], Kazu Amimoto, Masahide Inoue, Daisuke Sekine, Mamiko Inoue, Yuji Fujino, Shigeru Makita, Hidetoshi Takahashi
<b>04-3</b> 16:50	<b>The Effect of Preoperative Respiratory Training on the Motion of the Diaphragm after Rheumatic Heart Disease Surgery</b> <a href="#">Weiijan Tang</a> [China], Dongfeng Xie, Hanyue Guan, Li Jiang
<b>04-4</b> 17:00	<b>The Effect of the Low Frequent Physical Therapy to Middle-aged Hemophilia Cases</b> <a href="#">Junko Fujitani</a> [Japan], Ikuko Saotome, Masashi Fujimoto, Tomo Muramatsu, Wataru Yoshida
<b>04-5</b> 17:10	<b>Exergames in the Prevention of Fall Risk in Parkinson's Disease: A Randomized Controlled Trial</b> <a href="#">Antonio Ammendolia</a> [Italy], Angelo Indino, Gerardo De Scorpio, Nicola Marotta, Maria Giovanna Caruso, Lidia Fratto, Roberto Claudio Meliado, Gabriella Amendola, Maurizio Iocco
<b>04-6</b> 17:20	<b>Association Between Falls and Dual-task Walking in Individuals Post-stroke: A Prospective Cohort Study</b> <a href="#">Marco YC Pang</a> [Hong Kong], Charlotte Tsang, Huixi Ouyang, Deborah A Jehu
<b>04-7</b> 17:30	<b>180 Degrees Turning Strategies Measured with Inertial Measurement Units and Fall Risk in Post-stroke Hemiparetic Patients</b> <a href="#">Alain Pierre Yelnik</a> [France], Damien Ricard, Laurent Oudre, Alienor Vienne, Pierre P Vidal, Remi Barrois
<b>04-8</b> 17:40	<b>Can Home Based, Strength and Balance Training Exercises Program Reduce Risk of Falling in Older Community Dwelling Adults? A Randomized Controlled Trial</b> <a href="#">Nerimane I Abazi</a> [Albania], Adriana S Murtezani, Isme Humolli, Kaltrina Aliu
<b>04-9</b> 17:50	<b>Nine-square Exercise Could Improve Balance in Older Women at Risk for Falls: A Prospective Experimental Study</b> <a href="#">Sasiwimon Wannapong</a> [Thailand], Nomjit Nualnetr

**Freepapers 8: Robotics**Chairs: **Hermano Igo Krebs** [*United States*]**Marcel Simis** [*Brazil*]**Yuki Uchiyama** [*Japan*]

<b>08-1</b> 16:30	<b>Effect of the Robotic-assisted Gait Training Device (Welwalk®) Plus Physiotherapy in Improving the Ambulatory Function in Sub-acute Hemiplegic Stroke Patients: Preliminary Study</b> <a href="#">Patarapol Yotneungnit</a> [ <i>Thailand</i> ], Krisna Piravej, Natapatchakrid Thimabut, Jittima Charoenlimprasert, Thipwimon Sillapachai, Satoshi Hirano, Eiichi Saitoh
<b>08-2</b> 16:40	<b>Three Cases Using Welwalk for Chronic Hemiplegic Patients with Gait Abnormalities</b> <a href="#">Tetsuya Tsunoda</a> [ <i>Japan</i> ], Satoshi Hirano, Eiichi Saitoh, Ikuko Fuse, Junya Yamada, Daisuke Katoh, Haruki Osako, Yuya Sawada
<b>08-3</b> 16:50	<b>The Experience of Gait Training with Hybrid Assistive Limb (HAL) in ALS Patients</b> <a href="#">Kanami Kobayashi</a> [ <i>Japan</i> ], Tomoyuki Ueno, Mami Aoki, Shunsuke Yamauchi, Hideki Kadone, Kayo Hiruta, Yuriko Yashio, Yoshitaka Okamoto, Kensuke Nakaya, Nobuyuki Nishimura, Kimihisa Ishikawa, Masakazu Taketomi, Yukiyo Shimizu, Yasushi Hada
<b>08-4</b> 17:00	<b>Effects of Short-term Intensive Rehabilitation Treatment Using a Toyota Balance Exercise Assist Robot on Musculoskeletal Ambulation Disability Symptom Complex in Extremely Elderly Subjects</b> <a href="#">Hisato Tanaka</a> [ <i>Japan</i> ], Takaki Kasahara, Nanae Akiyama, Toyoko Asami
<b>08-5</b> 17:10	<b>Effect of a Torque-controlled Wearable Robotic Device in a Child with Incomplete Paraplegia Due to Spina Bifida</b> <a href="#">Hyunjin Choi</a> [ <i>South Korea</i> ], Byeonghun Na, Dongho Park, Beomki Yoo, Solrim Kim, Dongseok Kim, Kyoungchul Kong, Young Chae Chang, Dong-Wook Rha
<b>08-6</b> 17:20	<b>Immediate Change and Aftereffect of Gait Performance in Elderly People by Robot-Knee-Ankle-Foot-Orthosis (Orthobot)</b> <a href="#">Shihomi Kawasaki</a> [ <i>Japan</i> ], Koji Ohata, Yuichi Sawada, Yoshiyuki Higashi, Nodoka Kimura, Satomi Watanabe, Akihiro Tsuruda, Shiori Nogi, Tadao Tsuboyama
<b>08-7</b> 17:30	<b>Causes to Contraindicate Rehabilitation with Lokomat and G-EO System: Results from a Randomized Trial</b> <a href="#">Marcel Simis</a> [ <i>Brazil</i> ], Mariana Milazzotto, Linamara R. Battistella
<b>08-8</b>	Cancelled
<b>08-9</b> 17:40	<b>Enhancement of Gait Coordination through Robotic Therapy in Myelopathy Patients with Residual Motor Disturbances after Decompression Surgery</b> <a href="#">Sandra Puentes</a> [ <i>Japan</i> ], Hideki Kadone, Shigeki Kubota, Tetsuya Abe, Yukiko Shimizu, Yasushi Hada, Aiki Marushima, Yoshiyuki Sankai, Kenji Suzuki, Masashi Yamazaki

---

16:45–17:45

**Room 10**

**Short Workshop 11: Hands on Workshop: Serial Casting and Electrical Stimulation as Adjunctive Therapies to Enhance Botulinum Toxin Injection for Focal Spasticity**

Chairs: **Rajiv N Reebye** [Canada]

**Patricia Mills** [Canada]

**SW11-1 Evidence Base of Casting Post Botulinum Toxin Injection for Spasticity**

**Jordan Farag** [Canada]

**SW11-2 Hands on Workshop: Serial Casting and Electrical Stimulation as Adjunctive Therapies to Enhance Botulinum Toxin Injection for Focal Spasticity**

**Rajiv N Reebye** [Canada], Heather Finlayson, Jordan Farag, Patricia Mills, Serdar Kocer

**SW11-3 TENS as Adjunctive Therapy to Botulinum Toxin Injection for Spasticity: Evidence and Practical Pearls**

**Heather Finlayson** [Canada]

---

16:45–17:45

**Room 11**

**Short Workshop 17: Introduction of 3D Printing into a Community Rehabilitation Hospital in a Developing World Setting**

Chair: **Matthew N Bartels** [United States]

**SW17-1 Ultrasound-Guided Common and Uncommon Nerve Blocks with Alcohol for Spasticity Management**

**Yuxi Chen** [United States], Heakyung Kim, Mooyeon Oh-Park

**SW17-2 Using 3D Printing in a Developing National Setting: Some Applications and “3D Printer in a Box” as a Proposed Sustainable Solution**

**Matthew N Bartels** [United States]

---

18:10–19:10

**Room 1**

**Opening Ceremony**

**PL-1 Opening Lecture**

**Eiichi Saitoh** [Japan]

# Scientific Program

Day 2 — Tuesday, June 11, 2019

08:00–09:00

Room 2

## Short Workshop 18: Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator

Chair: Heakyung Kim [United States]

**SW18-1** Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator

Yuxi Chen [United States]

**SW18-2** Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator

Heakyung Kim [United States]

**SW18-3** Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator

Mooyeon Oh-Park [United States]

**SW18-4** Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator: Cross Sectional Anatomy of Lower Limb

Jeong-Yi Kwon [South Korea]

**SW18-5** Instrument Guided Injections for Spasticity Management by Using Ultrasound and Nerve Stimulator

Teerada Ployetch [Thailand]

08:00–09:00

Room 3

## Short Workshop 19: Sono-anatomy and Injection Techniques around the Neck

Chairs: Soo Yeon Kim [United States]

Sun Jae Won [South Korea]

**SW19-1** Anterior Neck: Brachial Plexus, Stellate Ganglion

Jung H. Kim [United States]

**SW19-2** Lateral Neck: Cervical Transforaminal/Selective Nerve Root Block, Cervical Medial Branch Block

Sun Jae Won [South Korea]

**SW19-3** Posterior Neck: Greater Occipital Nerve, Third Occipital Nerve Block

Soo Yeon Kim [United States]

**SW19-4** Neck Muscles  
[Se Won Lee](#) [United States]

08:00–09:00

**Room 4**

**Short Workshop 20: Prism Adaptation Treatment for Spatial Neglect after Stroke**

Chair: **Peii Chen** [United States]

**SW20-1** Spatial Neglect and Prism Adaptation Treatment  
[Peii Chen](#) [United States], Kimberly Hreha

**SW20-2** Literature Review of Prism Adaptation Procedures  
[Katsuhiko Mizuno](#) [Japan], Daisuke Nishida, Masatoshi Tahara

08:00–09:00

**Room 5**

**Short Workshop 21: Lumbar Lordosis, the Prime Target of Low Back Exercise: to Kill or to Keep**

Chair: **Sun Gun Chung** [South Korea]

Faculty: **Chulhyun Park** [South Korea]

**SW21-1** Lumbar Lordosis, the Prime Target of Low Back Exercise: to Kill or to Keep  
[Sun Gun Chung](#) [South Korea]

08:00–09:00

**Room 6**

**Short Workshop 22: Advancing the Management of the Upper Motor Neuron Syndrome**

Chair: **Thomas Watanabe** [United States]

**SW22-1** Evaluation and Muscle Selection for Gait-related Dysfunction  
[Alberto Esquenazi](#) [United States]

**SW22-2** Role of Robotics to Reduce Spasticity and Improve Chemo Denervation Effect  
[Ning Cao](#) [United States]

**SW22-3** Assessment and Management of Primary and Secondary Cervical Dystonia  
[Daniel Moon](#) [United States]

**SW22-4** Neuromodulation for Spasticity Management  
[Thomas Watanabe](#) [United States], Alberto Esquenazi, Ning Cao, Daniel Moon

08:00–09:00

Room 7

### Short Workshop 23: New Generation Patient Reported Outcome Measures to Enhance Physiatric Practice and Research

Chair: [Andrea Cheville](#) [United States]

- |               |   |
|---------------|---|
| <b>SW23-1</b> | <b>New and Next Generation Patient Reported Outcome Measures: Applications for Rehabilitation Medicine</b><br><a href="#">Andrea L Cheville</a> [United States]   |
| <b>SW23-2</b> | <b>Patient-Reported Outcomes Suitable for Use with Medical Rehabilitation Populations</b><br><a href="#">Allen Heinemann</a> [United States]  |
| <b>SW23-3</b> | <b>New Generation Patient Reported Outcome Measures to Enhance Physiatric Practice and Research</b><br><a href="#">Sean Smith</a> [United States], <a href="#">Andrea L Cheville</a> , <a href="#">Allen Heineman</a> |

08:00–09:00

Room 8

### Short Workshop 24: Mesenchymal Stem Cell Therapies for Knee Osteoarthritis: What's the Best Option? An Evidenced Based Review and Debate

Chairs: [Richard G Chang](#) [United States]  
[Gerardo E Miranda-Comas](#) [United States]

- |               |  |
|---------------|--|
| <b>SW24-1</b> | <b>Mesenchymal Stem Cell Therapies for Knee Osteoarthritis: What's the Best Option? An Evidenced Based Review and Debate</b><br><a href="#">Gerardo E Miranda-Comas</a> [United States]  |
| <b>SW24-2</b> | <b>Mesenchymal Stem Cell Therapies for Knee Osteoarthritis: What's the Best Option? An Evidenced Based Review and Debate</b><br><a href="#">Dayna McCarthy</a> [United States]   |
| <b>SW24-3</b> | <b>Mesenchymal Stem Cell Therapies for Knee Osteoarthritis: What's the Best Option? An Evidenced Based Review and Debate</b><br><a href="#">Richard G Chang</a> [United States], <a href="#">Dayaba McCerthy</a> , <a href="#">Gerardo E Miranda-Comas</a> |

08:00–09:00

Room 10

### Short Workshop 25: Traumatic Brain Injury and Concussion: Clinical Practice Guidelines, Updates and Challenges

Chair: [David Cancel](#) [United States]

- |               |   |
|---------------|---|
| <b>SW25-1</b> | <b>Traumatic Brain Injury and Concussion: Clinical Practice Guidelines, Updates and Challenges</b><br><a href="#">David Cancel</a> [United States], <a href="#">Veronica Matassa</a> , <a href="#">Ruth Alejandro</a> , <a href="#">Jared Levin</a> |
| <b>SW25-2</b> | <b>Traumatic Brain Injury and Concussion: Clinical Practice Guidelines, Updates and Challenges</b><br><a href="#">Veronica Matassa</a> [Argentina]  |



**SW25-3** TBD  
[Ruth Alejandro](#) [United States]

**SW25-4** Traumatic Brain Injury and Concussion: Clinical Practice Guidelines, Updates and Challenges  
[Jared Levin](#) [United States], David Cancel, Veronica Matassa, Ruth Alejandro

08:00–09:00

**Room 11**

**Short Workshop 29: Chronic Disease among Adults with Neurodisability; Understanding the Impact of Ageing, Disparities across Populations, and Prevention Strategies**

Chair: [Wilma MA Van Der Slot](#) [Netherlands]

**SW29-1** Noncommunicable Disease Including Mental Health Outcomes in Adults with CP from the United States  
[Mark D. Peterson](#) [United States]

**SW29-2** Chronic Disease among Adults with Neurodisability; Understanding the Impact of Ageing, Disparities Across Populations, and Prevention Strategies  
[Jennifer M Ryan](#) [Ireland]

**SW29-3** Strategies to Promote Health while Ageing with Cerebral Palsy  
[Wilma MA Van Der Slot](#) [Netherlands]

09:15–09:45

**Room 1**

**Keynote Lecture 4: Robot Assisted Training for the Upper Limb after Stroke: Main Results of the RATULS Multicentre Randomised Controlled Trial**

Chair: [Hermano Igo Krebs](#) [United States]

**KL4-1** Robot Assisted Training for the Upper Limb after Stroke: Main Results of the RATULS Multicentre Randomised Controlled Trial  
[Helen Rodgers](#) [United States]

09:45–10:15

**Room 1**

**Keynote Lecture 5: Moving Stroke Rehabilitation Forward: What are the Next Steps?**

Chair: [Nam-Jong Paik](#) [South Korea]

**KL5-1** Moving Stroke Rehabilitation forward: What are the Next Steps?  
[Gert Kwakkel](#) [Netherlands]

10:30–12:00

Room 2

**Special Session 12: Enhancing Caregiver Preparedness in Stroke Patients**Chair: **Mooyeon Oh-Park** [United States]

<b>SS12-1</b> 10:30	<b>Enhancing Caregiver Preparedness in Stroke Patients: Establishing a Designated Caregiver Center within Rehabilitation Hospital for Optimum Transition of Care</b> <a href="#">Mooyeon Oh-Park</a> [United States]
<b>SS12-2</b> 10:52	<b>Enhancing Caregiver Preparedness in Stroke Patients with Dysphagia</b> <a href="#">Jongmin Lee</a> [South Korea]
<b>SS12-3</b> 11:14	<b>Caregiver Burden in Stroke Survivors with Spatial Neglect</b> <a href="#">Peii Chen</a> [United States], Denise Fyffe
<b>SS12-4</b> 11:36	<b>Functionally-Disabling Deficits of Language and Reading in Post-Stroke Aphasia: Impact on Caregiver and the Use of Technology to Alleviate Caregiver Burden</b> <a href="#">Olga Boukrina</a> [United States], A.M. Barrett, William Graves

10:30–12:00

Room 3

**Special Session 15: Challenges of ICF Tool Implementation in Clinical Setting: Experiences from Three Countries**Chair: **Melissa Selb** [Switzerland]

<b>SS15-1</b> 10:30	<b>Implementation Challenges in China</b> <a href="#">Jianan Li</a> [China]
<b>SS15-2</b> 11:00	<b>Activities of the ICF Implementation Committee</b> <a href="#">Masahiko Mukaino</a> [Japan]
<b>SS15-3</b> 11:30	<b>Implementation Challenges in Malaysia</b> <a href="#">Julia Patrick Engkasan</a> [Malaysia], Masahiko Mukaino, Jianan Li

10:30–12:00

Room 4

**Special Session 18: Mobility of the Aged Population**Chairs: **Gerold R Ebenbichler** [Austria]**Walter R Frontera** [United States]

<b>SS18-1</b> 10:30	<b>Epidemiology of Aging and Physiology of Sarcopenia</b> <a href="#">Walter R Frontera</a> [United States]
<b>SS18-2</b> 10:48	<b>Targeting Back Muscle Function in Seniors: Key to Preventing Early Functional Decline and Frailty?</b> <a href="#">Gerold R Ebenbichler</a> [Austria]
<b>SS18-3</b> 11:06	<b>Assessment of Postural Balance</b> <a href="#">Thomas Bochdansky</a> [Austria]

**SS18-4**      **Physical Medical and Rehabilitative Interventions to Maintain and Improve Mobility in the Elderly**  
11:24  
Thomas Kienbacher [Austria]

**SS18-5**      **Neuromuscular Electrostimulation to Fight Sarcopenia in the Elderly**  
11:42  
Kern Helmut [Austria], Toshio Moritani

10:30–12:00

**Room 5**

**ISPRM Session 3: ISPRM and UN: Advancing the 2030 Agenda for Sustainable Development towards an Inclusive and Accessible Society**

Chairs: Bryan J O'Young [United States]  
Sam Wu [United States]

**IS3-1**      **Role and Impact of Sustainable Development Goals**  
Graham Alabaster [Switzerland]

**IS3-2**      **Community Care System for SDG3: Analytical Platform Covering**  
Motoo Kusakabe [Japan]

**IS3-3**      **The Impact of Village of Happiness**  
Dianne Davis [United States]

**IS3-4**      **Award Winning Corporate Practices for Inclusion of Persons with Disabilities in the Workplace**  
Linamara R. Battistella [Brazil]

10:30–12:30

**Room 6**

**Sponsored Session: Recent Topics of Swallowing Rehabilitation**

Sponsor: Japanese Society of Dysphagia Rehabilitation (JSDR)  
Chairs: Akio Tsubahara [Japan]  
Raynaldo Reyes Rey-Matias [Phillipines]

**SP1-1**      **Kinematic Analysis of VF Using an Open-source Software STAMPS**  
Byung-Mo Oh [South Korea], Woo Hyung Lee, Han Gil Seo, Changmook Chun

**SP1-2**      **Mechanism of Laryngeal Closure during Swallowing: Kinematic Analysis in Three Dimensions Using Swallowing CT**  
Yoko Inamoto [Japan], Eiichi Saitoh

**SP1-3**      **Dysphagia Management: Videoendoscopic Evaluation of Swallowing by Nurse in Japan**  
Hitoshi Kagaya [Japan]

**SP1-4**      **Cricopharyngeal Dysfunction in Post-stroke Dysphagia**  
Yoon Ghil Park [South Korea]

**SP1-5** Treating Dysphagia in Tracheotomized Stroke Patients - Pharyngeal Electrical Stimulation Finally on the Horizon?

Paul Muhle [Germany]

**SP1-6** Swallowing Rehabilitation: Dysphagia in Older Adults

Marlís González Fernández [United States]

10:30–12:00

Room 7

### Special Session 21: Impact of Rehabilitation on Long-term Functional Outcome of Stroke Survivors: Insights from Stroke Cohort Study in Different Countries

Chairs: Yun-Hee Kim [South Korea]

Isabelle Bonan [France]

**SS21-1** Why the Timing of Inpatient Stroke Rehabilitation Might be Lifesaving- Outcomes of Stroke Rehabilitation in Australia are Time Sensitive

10:30

Steven Faux [Australia]

**SS21-2** Impact of Rehabilitation on Outcome in Patients with Ischemic Stroke: A Nationwide Retrospective Cohort Study in Japan

10:48

Maiko Yagi [Japan], Hideo Yasunaga, Hiroki Matsui, Kojiro Morita, Kiyohide Fushimi, Masashi Fujimoto, Teruyuki Koyama, Junko Fujitani

**SS21-3** Effect of Inpatient Rehabilitation on Disability Prevention: The KOSCO Study

11:06

Deog Young Kim [South Korea]

**SS21-4** Long-term Functional Outcome of Stroke Survivor

11:24

Isabelle Bonan [France]

**SS21-5** Cognitive Reserve and Post-Stroke Cognitive Impairment

11:42

Yun-Hee Kim [South Korea]

10:30–12:00

Room 8

### ISPRM Session 7: ISPRM Recommendations

Chairs: Marco Franceschini [Italy]

Marta Imamura [Brazil]

**IS7-1** The Role of Electroneuromyography (ENMG) in the Clinical Practice and Education of PRM Physicians

Gulseren Akyuz [Turkey], Ozge Kenis-Coskun, Ilker Yagci, Marco Franceschini, Walter R Frontera, Jorge Lains

**IS7-2** PRM and Metabolic Conditions

Paolo Capodaglio [Italy]

**IS7-3** ISPRM Recommendations - Cancer Rehabilitation

Nasim Chowdhury [United States]

<b>IS7-4</b>	<b>Existing Guidelines on Prevention and Management of Frailty in the Elderly: The PRM Perspective</b> <a href="#">Eleftheria Antoniadou</a> [Greece]
<b>IS7-5</b>	<b>TBD</b> <a href="#">Marta Imamura</a> [Brazil]
<b>IS7-6</b>	<b>ISPRM Recommendations - Existing Guidelines on Osteoporosis: The PRM Perspective</b> <a href="#">Giovanni Iolascon</a> [Italy], Antimo Moretti, Marco Paoletta, Sara Liguori, Francesca Gimigliano
<b>IS7-7</b>	<b>Existing Guidelines on Multiple Sclerosis the PRM Perspective</b> <a href="#">Mauro Zampolini</a> [Italy]

10:30–12:00

**Room 10**

### ISPRM Session 9: Capacity Building for Rehabilitation in Low Resource Countries

Chairs: [Wouter De Groote](#) [Belgium]  
[Abderrazak Hajjioui](#) [Morocco]

<b>IS9-1</b>	<b>Capacity Building of Human Resources and Service Delivery Post Disaster Rehabilitation: Our Nepal Experience</b> <a href="#">Nadia Mustafah</a> [Malaysia], As Naicker, Brenda S Yuliawiratman, Nor Azira Ismail, Siti Suhaida Sudin, Nazirah Hasnan, Ohnmar Htwe
<b>IS9-2</b>	<b>Online Training Program in Rehabilitation at the System Level of Morocco</b> <a href="#">Andrew J Haig</a> [United States]
<b>IS9-3</b>	<b>Strengthening Rehabilitation at the System Level of Morocco</b> <a href="#">Abderrazak Hajjioui</a> [Morocco]

10:30–11:30

**Room 11**

### Short Workshop 30: Cancer Rehabilitation in the Low and Middle Income Countries

Chair: [Vishwa S Raj](#) [United States]

<b>SW30-0</b>	<b>Cancer Rehabilitation in the Low and Middle Income Countries</b> <a href="#">Vishwa S Raj</a> [United States]
<b>SW30-1</b>	<b>Update of North African Cancer Rehabilitation Programs</b> <a href="#">Abderrazak Hajjioui</a> [Morocco], Nawfel Mellas, Maryam Fourtassi
<b>SW30-2</b>	<b>Current State of Cancer Rehabilitation Services in Low and Middle Income Countries</b> <a href="#">Bhasker Amatya</a> [Australia], Fary Khan
<b>SW30-3</b>	<b>Cancer Rehabilitation in Pakistan: Ground Realities and the Way Forward</b> <a href="#">Farooq A Rathore</a> [Pakistan], Nasir Sahibzada
<b>SW30-4</b>	<b>TBD</b> <a href="#">Filipinas G Ganchoon</a> [Philippines]

11:30–12:30

Room 9

**Short Workshop 31: Advance Diagnostic and Interventional Ultrasound of the Shoulder**Chair: **Jeimylo C De Castro** [Philippines]

<b>SW31-1</b>	TBD Jeimylo C De Castro [Philippines]
<b>SW31-2</b>	Advanced Diagnostic and Interventional Ultrasound of the Shoulder Franklin SP Domingo [Philippines]
<b>SW31-3</b>	Advance Diagnostic and Interventional Ultrasound of the Shoulder Wesley Chih-Chun Chen [Philippines]
<b>SW31-4</b>	Advance Diagnostic and Interventional Ultrasound of the Shoulder Michael Francis B Obispo [Philippines]
<b>SW31-5</b>	TBD Charles Kang [Philippines]

12:50–13:50

Room 2

**Luncheon Seminar 4: Integrated Volitional Control Electrical Stimulator (IVES™) for the Recovery of the Upper Extremity after Stroke: Basic Concepts and Clinical Applications**

Sponsor: OG Wellness Technologies Co., Ltd.

Chair: **Kotaro Takeda** [Japan]

<b>LS4-1</b>	Integrated Volitional Control Electrical Stimulator (IVES™) for the Recovery of the Upper Extremity after Stroke: Basic Concepts and Clinical Applications Tomofumi Yamaguchi [Japan]
--------------	--

12:50–13:50

Room 3

**Luncheon Seminar 5: Activity Monitoring of Inpatients Using a Smart Clothing System**

Sponsor: NIPPON TELEGRAPH AND TELEPHONE CORPORATION/ Toray Industries, Inc./ NTT DOCOMO, INC.

Chair: **Izumi Kondo** [Japan]

<b>LS5-1</b>	Activity Monitoring of Inpatients Using a Smart Clothing System Masahiko Mukaino [Japan]
--------------	---

---

12:50–13:50

Room 4

**Luncheon Seminar 6: Practical Gait Reconstruction Using a WPAL Robotic Exoskeleton in People with Spinal Cord Injury**

Sponsor: TOMEI BRACE CO., LTD.

Chair: Yoichi Shimada [Japan]

**LS6-1** Practical Gait Reconstruction Using a WPAL Robotic Exoskeleton in People with Spinal Cord Injury  
Shigeo Tanabe [Japan]

---

14:00–14:30

Room 1

**Keynote Lecture 6: Impaired Motor Control and Its Rehabilitation**

Chair: Kazuhisa Domen [Japan]

**KL6-1** Impaired Motor Control and Its Rehabilitation  
Mark L Latash [United States]

---

14:45–16:15

Room 2

**Special Session 13: Cochrane Rehabilitation: Services for Evidence Based Rehabilitation Practice**

Chairs: Stefano Negrini [Italy]

Walter R Frontera [United States]

**SS13-1** Cochrane Rehabilitation Knowledge Translation Activities for Different Stakeholders  
14:45  
Charlotte Kiekens [Belgium], Chiara Arienti, Julia Patrick Engkasan, Francesca Gimigliano, Frane Grubisic, Elena Ilieva, Aydan Oral, Joel Pollet, Stefano Negrini

**SS13-2** Services for All: Methodological Developments  
15:15  
Thorsten Meyer [Germany], Chiara Arienti, Julia Patrick Engkasan, Francesca Gimigliano, Frane Grubisic, Charlotte Kiekens, Elena Ilieva, Stefano Negrini, Aydan Oral, Antti Malmivaara

**SS13-3** Services for All: Prioritisation of Rehabilitation Research  
15:45  
Stefano Negrini [Italy], Chiara Arienti, Julia Patrick Engkasan, Francesca Gimigliano, Frane Grubisic, Elena Ilieva, Stefano Giuseppe Lazzarini, Aydan Oral, Charlotte Kiekens

---

14:45–16:15

Room 3

**Special Session 16: Physiatric Approach in Cancer Related Lymphedema: Diagnosis and Evaluation**

Chairs: Ji Hye Hwang [South Korea]

Jae Yong Jeon [South Korea]

**SS16-1** Physiatric Approach in Cancer Related Lymphedema: Diagnosis and Evaluation: 1. Introduction and Diagnosis of Cancer Related Lymphedema  
14:45  
Ji Hye Hwang [South Korea]

**SS16-2** Evaluation of Lymphedema (Volume Measurement, Bioimpedance, and Component Analysis)  
15:15  
Jae Yong Jeon [South Korea]

**SS16-3** Predictive and Prognostic Value of Lymphoscintigraphy in Lymphedema  
15:45  
Joon Young Choi [South Korea]

14:45–16:15

Room 4

**Special Session 19: Myofascial Pain Syndrome: Peripheral and Central Mechanisms Contributing to the Pathophysiology and Clinical Manifestations of Painful Myofascial Trigger Points and Surrounding Fascia**

Chair: Dinesh Kumbhare [Canada]

**SS19-1** TBD  
14:45  
Jay Shah [United States]

**SS19-2** Myofascial Pain Syndrome: Peripheral and Central Mechanisms Contributing to the Pathophysiology and Clinical Manifestations of Painful Myofascial Trigger Points and Surrounding Fascia  
15:07  
John Z Srbely [Canada], Jay P Shah, Antonio Stecco, Dinesh A Kumbhare

**SS19-3** New Therapeutic Approaches for Spasticity  
15:29  
Antonio Stecco [United States], Preeti Raghavan

**SS19-4** TBD  
15:51  
Dinesh Kumbhare [Canada]

14:45–16:15

Room 5

**ISPRM Session 4: Mobility, Physical Activity, and Organized Sport for Persons with Disabilities in Low- to Middle-Income Countries**

Chairs: David Constantine [United Kingdom]  
Yetsa Tuakli-Wosornu [United States]

**IS4-1** TBD  
Abena Tannor [Ghana]

**IS4-2** TBD  
Andre Krassikov [Canada]

**IS4-3** TBD  
Peter Bukhala [Kenya]

**IS4-4** TBD  
Josefina López-García [Venezuela]



**ISPRM Session 6: Empowering the Clinician Educator**Chair: **Rochelle Dy** [United States]

<b>IS6-1</b>	<b>Empowering the Clinician Educator</b> <i>Rochelle Dy</i> [United States]
<b>IS6-2</b>	<b>Empowering the Clinician Educator: Flipped Class Room</b> <i>Mooyeon Oh-Park</i> [United States]
<b>IS6-3</b>	<b>Feedback and the Rehabilitation Clinician-Educator</b> <i>Andrew Cole</i> [Australia]
<b>IS6-4</b>	<b>Resident Teaching - There's an App for That!</b> <i>Mauro Zampolini</i> [Italy]
<b>IS6-5</b>	<b>Synchronous and Asynchronous Telerehabilitation for Community-Dwelling Stroke Patients with Impaired Mobility as Instructional Tool for Resident Trainees in Physical Medicine and Rehabilitation</b> <i>Reynaldo Reyes Rey-Matias</i> [Philippines], Carl Froilan D Leochico

**Freepapers 9: Miscellaneous**Chairs: **Fary Khan** [Australia]  
**Abderrazak Hajjioui** [Morocco]  
**Satoru Ebihara** [Japan]

<b>09-1</b> 14:45	<b>Effect of Post-CABG Cardiac Rehabilitation on Six Minute Walk Test (6MWT) Parameters: A Pilot Study</b> <i>Dilshad Hunain Al Arabia</i> [Pakistan], Zubair Ali Khowaja, Nabila Najam, Muhammad Shoab, Syed Imran Ahmad
<b>09-2</b> 14:55	<b>Pathological Fractures in Patients with Secondary Bone Cancer During Rehabilitation Interventions: A Short Term Cohort Study</b> <i>Christina May M. de Brito</i> [France], Laura Tabacof, Marta Imamura, Linamara R. Battistella
<b>09-3</b> 15:05	<b>Survey of Female Athlete Triad (FAT) in Elite Female Wheelchair Basketball Players</b> <i>Yukiyo Shimizu</i> [Japan], Hirotaka Mutsuzaki, Kaori Tachibana, Kazushi Hotta, Yasuyoshi Wadano
<b>09-4</b> 15:15	<b>Physical Activity (PA) and Diabetes Mellitus (DM): The Knowledge of Physician and Barriers to Guideline Implementation in Morocco</b> <i>Abderrazak Hajjioui</i> [Morocco], Nohaila Hassanain, Maryam Fourtassi
<b>09-5</b> 15:25	<b>Rehabilitation of Postbariatric Surgeries Polyneuropathies</b> <i>Maher Saad BenJadid</i> [Saudi Arabia]
<b>09-6</b> 15:35	<b>National Plan for Disability and Rehabilitation in Russia: Condition and Prospects</b> <i>Kristina Roshko</i> [Russia], Gennady N. Ponomarenko, Alexander A. Shoshmin

- 09-7**      **Rehabilitation: The Missing Link in Improving Health of Refugees**  
15:45  
[Fary Khan](#) [Australia], Bhasker Amatya
- 09-8**      **Efficacy of a Therapeutic Patient Education (TPE) Self Management Program for Stroke Survivors: The Lay Project Italian Experience**  
15:55  
[Roberta Bardelli](#) [Italy], Stefania Fugazzaro, Monia Allisen Accogli, Monica Denti, Alessandra Altavilla, Enrica Cavalli, Laura Dallolio, Rossella Messina, Donatella Pagliacci, Simona Calugi, Stefania Costi, Stefano Cavazza, Claudio Tedeschi, Mariangela Taricco
- 09-9**      **Differential Effectiveness of High-frequency Rehabilitation in Patients Based on Acute Cerebral Infarction Severity: A Retrospective Cohort Study**  
16:05  
[Tomoko Nakazora](#) [Japan], Konosuke Iwamoto, Tetsuhito Kyozyuka, Toshiki Shirotani, Yuki Uchiyama, Kazuhisa Domen

14:45–16:15

Room 8

**Freepapers 10: Stroke I**Chairs: [Katsunori Ikoma](#) [Japan][Naoki Wada](#) [Japan][Nachum Soroker](#) [Israel]

- 010-1**      **Using Multi-Perturbation Shapley Value Analysis to Unravel the Impact of Lesion Configuration on Residual Motor Control after Stroke**  
14:45  
[Shay Ofir](#) [Israel], Silvi Frenkel-Toledo, Isaac Meilijson, Nachum Soroker
- 010-2**      **Efficacy of EEG-fMRI Neurofeedback for Stroke Rehabilitation in Relation to the DTI Structural Damage: a Pilot Study**  
14:55  
[Isabelle Bonan](#) [France], Giulia Lioi, Mathis Fleury, Emilie Leveque-Le Bars, Anatole Lecuyer, Christian Barillot, Simon Butet
- 010-3**      **Associations of Diffusion-Tensor Fractional Anisotropy and Motor Outcome Assessments after Cerebral Infarction in Rehabilitation**  
15:05  
[Yuichi Shinoda](#) [Japan], Sumire Ishiyama, Masanori Maruyama
- 010-4**      **Associations of Diffusion-tensor Fractional Anisotropy and Outcome Assessments after Cerebral Infarction**  
15:15  
[Tetsuo Koyama](#) [Japan], Yuki Uchiyama, Kazuhisa Domen
- 010-5**      **Effects of Protein Supplementation on Aerobic Training Induced Gains in Cardiopulmonary Fitness, Muscle Mass, and Functional Performance in Chronic Stroke: A Randomized Controlled Pilot Study**  
15:25  
[Chih-Yang Hsu](#) [Taiwan], Yu-Hsuan Cheng, Li Wei, Heng Wang, Shih-Wei Huang, Wing P. Chan, Yen-Nung Lin
- 010-6**      **Late Recovery from Motor Impairment Following Stroke**  
15:35  
[Nachum Soroker](#) [Israel], Shay Ofir, Justine Lowenthal-Raz, Shirley Handelzalts, Gil Friedberg, Silvi Frenkel-Toledo
- 010-7**      **Relationships Between Mechanical Energy Consumption and Motor Paralysis in Sit-to-stand Motion of Stroke Patients**  
15:45  
[Hiroki Hanawa](#) [Japan], Keisuke Hirata, Taku Miyazawa, Keisuke Kubota, Moeka Sonoo, Tsutomu Fujino, Takanori Kokubun, Naohiko Kanemura

**O10-8**      **Leukoaraiosis, an Invisible Factor Contributes to Balance and Gait Disorders after Stroke**  
15:55  
[Shenhao Dai](#) [France], Celine Piscicelli, Emmanuelle Clarac, Patrice Davoine, Anne Chrispin, Marie Jaeger, Olivier Detante, Andrea Kistner, Monica Baciú, Marc Hommel, Dominic Perennou

**O10-9**      **Relationship among Unaffected-side Items in Stroke Impairment Assessment Set in Comprehensive Inpatient Rehabilitation**  
16:05  
[Kei Yagihashi](#) [Japan], Sonoda Shigeru, Makoto Watanabe, Sayaka Okamoto, Yuko Okuyama, Hideto Okazaki, Kazuyo Oguchi

14:45–16:15

**Room 9**

**ISPRM Session 8: Stroke: Rehabilitation Pathway and PRM Role**

Chairs: **Isabelle Laffont** [France]  
**Gerard E Francisco** [United States]

**IS8-1**      **Stroke: Rehabilitation Pathway and PRM Role**  
[Alexis Schnitzler](#) [France], Louis Jacob, Alain Yelnik

**IS8-2**      **Stroke Rehabilitation and PRM Role in Japan**  
[Yuki Uchiyama](#) [Japan], Kazuhisa Domen

**IS8-3**      **The Role of PRM Stroke Care: The United States Perspective**  
[Michael W O'Dell](#) [United States]

14:45–15:45

**Room 10**

**Short Workshop 26: Current State of Medical Residency Programs in Physical Medicine and Rehabilitation**

Chairs: **Melina Longoni** [Argentina]  
**Viviana C Horna** [Mexico]

**SW26-1**      **Medical Residency Programs around the World**  
[Marta Imamura](#) [Brazil]

**SW26-2**      **Current State of Medical Residency Programs in Physical and Rehabilitation Medicine - Brazil**  
[Leandro R luamoto](#) [Brazil], Marta Imamura, Viviana C Horna, Melina Longoni, Linamara R. Battistella

14:45–15:45

**Room 12**

**Short Workshop 32: Application of Ultrasonography in Outpatient Physiatry Clinic; Focusing on Foot and Ankle Pathology**

Chair: **Se Won Lee** [United States]

**SW32-1**      **Application of Point of Care Ultrasonography in Outpatient Physiatry Clinic - Focusing on Foot and Ankle Pathology**  
[Se Won Lee](#) [United States], Mohammed Emam, Soo Yeon Kim, Jung Kim

- SW32-2** Application of Point of Care Ultrasonography in Outpatient Physiatry Clinic - Focusing on Foot and Ankle Pathology  
Mohammed Emam [United States], Mohammed Emam, Soo Yeon Kim, Jung Kim
- SW32-3** Application of Point of Care Ultrasonography in Outpatient Physiatry Clinic - Focusing on Foot and Ankle Pathology  
Soo Yeon Kim [United States], Mohammed Emam, Soo Yeon Kim, Jung Kim
- SW32-4** Application of Point of Care Ultrasonography in Outpatient Physiatry Clinic - Focusing on Foot and Ankle Pathology  
Jung Kim [United States], Mohammed Emam, Soo Yeon Kim, Jung Kim

15:00–17:00

Room 17

**Hands-on Seminar 1: Hands on Integrated Volitional control Electrical Stimulator (IVES)**

Sponsor: OG Wellness Technologies Co., Ltd.

Instructor: Tomofumi Yamaguchi [Japan]

Tutors: Tomofumi Yamaguchi [Japan]

Kotaro Takeda [Japan]

Koki Ikuno [Japan]

Shogo Imamura [Japan]

Natsuki Katagiri [Japan]

Daisuke Kudo [Japan]

Tadaki Koseki [Japan]

Shigehiro Nanba [Japan]

15:45–16:45

Room 10

**Short Workshop 27: Postural Stability in Pediatric Disabilities: Implications for Pediatric Rehabilitation Practice**

Chairs: Gulseren Akyuz [Turkey]

Evrin Karadag-Saygi [Turkey]

- SW27-1** Postural Stability in Pediatric Disabilities: Implications for Pediatric Rehabilitation Practice - Typical Development of Postural Control: How It is Affected in Pediatric Disabilities?  
Ozge Kenis-Coskun [Turkey]
- SW27-2** Advantages and Limitations of the Most Commonly Available Balance Assessment Tools in Pediatric Disabilities and Their Comparison to Computerized Tools  
Evrin Karadag-Saygi [Turkey]
- SW27-3** Postural Stability in Pediatric Disabilities: Implications for Pediatric Rehabilitation Practice - Aspects of Postural Stability in Patients with Cerebral Palsy, Spina Bifida and Dyslexia  
Ozge Kenis-Coskun [Turkey]

15:45–16:45

Room 11

**Short Workshop 33: Rehabilitation of Chronic Shoulder Pain -from Exercise to Neuromodulation**

Chair: **Vu Nguyen** [United States]

<b>SW33-1</b>	<b>Rehabilitation of Chronic Shoulder Pain - From Exercise to Neuromodulation</b> Vu Nguyen [United States], Richard Wilson, Nitin Jain, Chong Kim
<b>SW33-2</b>	<b>Evidence Based Neuromodulatory Treatment for Chronic Shoulder Pain</b> Richard D Wilson [United States]
<b>SW33-3</b>	<b>Rehabilitation of Chronic Shoulder Pain - From Exercise to Neuromodulation</b> Chong Kim [United States]

16:30–18:00

Room 2

**Special Session 14: Clinical Neurophysiology in PRM, from Brain to Muscle**

Chairs: **Toshiyuki Fujiwara** [Japan]  
**Larry Robinson** [Canada]

<b>SS14-1</b> 16:30	<b>Updates in Diagnosis and Prognosis of Traumatic Neuropathy</b> Larry R. Robinson [Canada]
<b>SS14-2</b> 17:00	<b>Assessment of Spinal Reflexes</b> Toshiyuki Fujiwara [Japan]
<b>SS14-3</b> 17:30	<b>Transcranial Magnetic Stimulation for Assessment of Brain Function</b> Michiyuki Kawakami [Japan]

16:30–18:00

Room 3

**Special Session 17: Cancer Rehabilitation: Present and Future Trends of Treatment and Implications**

Chair: **Amy H Ng** [United States]

<b>SS17-1</b> 16:30	<b>Cancer Rehabilitation Acute Inpatient Rehabilitation</b> Amy H Ng [United States], Ki Shin
<b>SS17-2</b> 17:00	<b>Precaution for Cancer Patients with Bone Metastasis</b> Ying Guo [United States]
<b>SS17-3</b> 17:30	<b>Advances in Immunotherapy Treatment and Related Rehabilitation Complications</b> Amy H Ng [United States], Diana Molinares

16:30–18:00

Room 4

**Special Session 20: Clinical Pearls to Improve Team Care and Patient Outcomes**Chair: **Dale C Strasser** [United States]

<b>SS20-1</b> 16:30	<b>Pearls from Team Effectiveness Research and Clinical Experience</b> <a href="#">Dale C Strasser</a> [United States]
<b>SS20-2</b> 17:00	<b>Clinical Peals to Improve Team Care and Patient Outcomes</b> <a href="#">Elisabeth J Preston-Hsu</a> [United States]
<b>SS20-3</b> 17:30	<b>Response and Discussion Leader</b> <a href="#">Jan Lexall</a> [Sweden]

16:30–18:00

Room 5

**ISPRM Session 5: Publications and Communications Committee Session**Chairs: **Andre Thevenon** [France]**Shin-Ichi Izumi** [Japan]

<b>IS5-1</b>	<b>Scientific Communication in the Era of Social Network</b> <a href="#">Mauro Zampolini</a> [Italy]
<b>IS5-2</b>	<b>The Race to an Impact Factor the Successful Experience of the Annals</b> <a href="#">Dominic Perennou</a> [France]
<b>IS5-3</b>	<b>Predatory Publishing in Rehabilitation</b> <a href="#">Jeffrey R Basford</a> [United States]

16:30–18:00

Room 6

**Joint Session 4: ISPRM/WFNR Joint Session: Stroke Rehabilitation in Developing Countries**Chairs: **Leonard S W Li** [Hong Kong]**Jianan Li** [China]

<b>JS4-1</b>	<b>How Can the Threat of Stroke be Reduced in the Perspective of UN Millennium Goals?</b> <a href="#">Caterina C Pistarini</a> [Italy], Leonard S W Li, Jianan Li, Gert Kwakkel
<b>JS4-2</b>	<b>Epidemiology, Impact and Policy Implication in China and Developing Countries</b> <a href="#">Jianan Li</a> [China], Xiaoring Hu
<b>JS4-3</b>	<b>Predicting Neurological and Functional Outcome Early after Stroke</b> <a href="#">Gert Kwakkel</a> [Netherlands]

16:30–18:00

Room 7

**Special Session 22: Novel Advancements in the Treatment of Musculoskeletal Pain and Related Disorders**

Chairs: **Simon F.T. Tang** [Taiwan]

**Sheng Bi** [China]

<b>SS22-1</b> 16:30	<b>Echo-Guided Injection for Foot and Ankle Painful Lesions</b> <a href="#">Simon T.T. Tang</a> [Taiwan]
<b>SS22-2</b> 16:42	<b>Ultrasound Guided Corticosteroid Injection for Post Stroke Hemiplegic Shoulder Pain</b> <a href="#">Sheng Bi</a> [China]
<b>SS22-3</b> 16:54	<b>Emerging Theory of Sensitization in Chronic Pain</b> <a href="#">Areerat Suputtitada</a> [Thailand]
<b>SS22-4</b> 17:06	<b>Ultrasound Guided Nerve Hydrodissection in Entrapment Neuropathy</b> <a href="#">Gi-Young Park</a> [South Korea]
<b>SS22-5</b> 17:18	<b>Transcranial Focused Ultrasound Neuromodulation a Potential Pain-Killer? A Review of Current Evidence</b> <a href="#">Ming-Yen Hsiao</a> [Taiwan]
<b>SS22-6</b> 17:30	<b>Musculoskeletal and Neurogenic Pain in Cancer Survivor - Review of Evidence and Role of Ultrasound-Guided Interventions</b> <a href="#">Shaw-Gang Shyu</a> [Taiwan]
<b>SS22-7</b> 17:42	<b>Precision Ultrasound Guided Injection Intervention Skills in Treating Spinal Pain Disorders</b> <a href="#">Carl P.C. C Chen</a> [Taiwan]

16:30–18:00

Room 8

**Freepapers 11: Stroke II**

Chairs: **Izumi Kondo** [Japan]

**Itshak Melzer** [United States]

**Shin Yamada** [Japan]

<b>O11-1</b> 16:30	<b>Biomechanical Properties of "Volitional Step" and "Compensatory Step" Movements in People with Stroke</b> <a href="#">Itshak Melzer</a> [United States], Shirley Handelzalts, Flavia Steinberg-Henn, Michal Kanner-Furman, Ganit Gray, Nachum Soroker, Guy Shani
<b>O11-2</b> 16:40	<b>Closed-loop Rehabilitation Model: An Instance of the Feasibility and Effectiveness of Camera-based Mirror Visual Feedback for Stroke Patients</b> <a href="#">Li Ding</a> [China], Jinyang Zhuang, Shugeng Chen, Hwei Wang, Zhijie He, Jie Jia
<b>O11-3</b> 16:50	<b>Altered Resting-state Effective Connectivity of the Primary Motor Cortex in Chronic Stroke Patients after Motor Imagery Training</b> <a href="#">Hwei Wang</a> [China], Hao Yang, Mingxia Fan, Limin Sun, Jie Jia

<b>O11-4</b> 17:00	<b>Assessment of Motor Imagery Ability in Stroke Patients through Mental Rotation Test with Different Types of Visual Stimulation</b> <a href="#">Hewei Wang</a> [China], Yunlong Wang, Jianhui Wang, Jie Jia
<b>O11-5</b> 17:10	<b>Psychometric Properties of the Reachable Workspace Evaluated with a Kinect Sensor in Patients with Hemiparetic Stroke</b> <a href="#">Kohei Okuyama</a> [Japan], Michiyuki Kawakami, Shohei Tsuchimoto, Miho Ogura, Kohsuke Okada, Katsuhiko Mizuno, Junichi Ushiba, Meigen Liu
<b>O11-6</b> 17:20	<b>Comorbidity and Intercurrent Diseases in Geriatric Stroke Rehabilitation: A Multicentre Observational Study in Skilled Nursing Facilities</b> <a href="#">Bianca Buijck</a> [Netherlands], Anouk D Kabboord, Monica Van Eijk, Romke Van Balen, Wilco P Achterberg, Raymond T Koopmans
<b>O11-7</b> 17:30	<b>Rasch Analysis for the Requirements of National Agency for Automotive Safety and Victims' Aid (NASVA) Scoring System</b> <a href="#">Izumi Kondo</a> [Japan], Eiko Takano, Chiho Honda, Jun Shinoda, Yoshihide Nagamine, Aiko Osawa
<b>O11-8</b> 17:40	<b>Can Lipid Profile be Associated with Outcome after Traumatic Brain Injury?</b> <a href="#">Sharon Shaklai</a> [Israel], Noa Eliaz-Friling, Yaron Sacher, Aviva Zeev, Sigal Eilat-Adar
<b>O11-9</b> 17:50	<b>Brain Injury Rehabilitation Experience in a Territory Care Rehabilitation Hospital in Saudi Arabia</b> <a href="#">Sami Ullah</a> [Saudi Arabia], Ahmad Z Qureshi, Imad S Moukais, Adel A Al-Dajani

16:30–18:00

Room 9

**Special Session 23: Building a Platform for Standard Care for People with Cerebral Palsy**Chair: [Heakyung Kim](#) [United States]

<b>SS23-1</b> 16:30	<b>Cerebral Palsy in Ghana</b> <a href="#">Abena Tannor</a> [Ghana]
<b>SS23-2</b> 16:48	<b>Current Care for Children with Cerebral Palsy in Japan</b> <a href="#">Nobuhiko Haga</a> [Japan]
<b>SS23-3</b> 17:06	<b>The Healthcare Management of Cerebral Palsy in China</b> <a href="#">Qing Du</a> [China]
<b>SS23-4</b> 17:24	<b>Building a Platform for Standard Care for People with Cerebral Palsy</b> <a href="#">Gessica Della Bella</a> [Italy]
<b>SS23-5</b> 17:42	<b>Building a Platform for Standard Care for People with Cerebral Palsy</b> <a href="#">Heakyung Kim</a> [United States]



---

16:45–17:45

**Room 10**

**Short Workshop 28: Return to Sport after Sport Related Injuries: What Factors to Consider?**

Chair: **Gerardo E Miranda-Comas** *[United States]*

**SW28-1 Return to Sports after Injury: A General Framework**

[Gerardo E Miranda-Comas](#) *[United States]*

**SW28-2 Rehabilitation Following Injury: Physical and Psychologic Readiness for Return to Sports**

[William F Micheo](#) *[Puerto Rico]*

**SW28-3 Role of Objective Tests in the Return to Sports Decision**

[Walter R Frontera](#) *[United States]*

---

16:45–17:45

**Room 11**

**Short Workshop 34: Stroke Rehabilitation - Specific Topics in the Post-Acute Care Continuum**

Chair: **Vu Nguyen** *[United States]*

**SW34-1 Post-Stroke Acute Care Trajectories and the Importance of Coordinated Care**

[Janet Prvu Bettger](#) *[United States]*

**SW34-2 Stroke Rehabilitation - Specific Topics in the Post-Acute Care Continuum Session Type**

[Vu Nguyen](#) *[United States]*, [Janet Prvu Bettger](#), [Mooyeon Park](#)

**SW34-3 Stroke Rehabilitation - Specific Topics in the Post-Acute Care Continuum Post Stroke Delirium Assessment and Management in Rehabilitation Setting**

[Mooyeon Oh-Park](#) *[United States]*

# Scientific Program

Day 3 — Wednesday, June 12, 2019

09:00–09:30

Room 1

## Keynote Lecture 7: Stroke Rehabilitation -Where are We Heading?

Chair: Leonard S W Li *[Hong Kong]*

**KL7-1** Stroke Rehabilitation-Where are We Heading?  
Katharina Stibrant Sunnerhagen *[Sweden]*

09:30–10:00

Room 1

## Keynote Lecture 8: Regenerative Medicine for Spinal Cord Injury Using iPS Cells

Chair: Yoichi Shimada *[Japan]*

**KL8-1** Regenerative Medicine for Spinal Cord Injury Using iPS Cells  
Masaya Nakamura *[Japan]*

10:00–12:00

Room 6

## Sponsored Session: Current Status and Future Perspective of Inpatient Rehabilitation around the World

Sponsor: Kaifukuki Rehabilitation Ward Association

Chairs: Shigeru Sonoda *[Japan]*

Alberto Esquenazi *[United States]*

**SP2-1** "Kaifukuki Rehabilitation Ward" in Japan  
Takatsugu Okamoto *[Japan]*, Shigeru Sonoda, Ichiro Miyai

**SP2-2** Inpatient Rehabilitation: Experience Providing Rehabilitation in the United States  
Marlís González Fernández *[United States]*

**SP2-3** Inpatient Rehabilitation System in China  
Lixin Zhang *[China]*

**SP2-4** Rehabilitation System in Korea: in the Process of Establishment  
Hyungik Shin *[South Korea]*

**SP2-5** Inpatient Rehabilitation Services in Thailand  
Witsanu Kumthornthip *[Thailand]*

**SP2-6** Cutting-edge Comprehensive Inpatient Rehabilitation in a University Hospital  
Yohei Otaka *[Japan]*

10:15–10:45

Room 2

**ISPRM/JARM Special Lecture 1: Robot Assisted Training for the Upper Limb after Stroke (RATULS): A 770 Stroke Patients Study- Kinematics & Kinetics Results**

Chair: Megumi Shimodozono [Japan]

- SL1-1** Robot Assisted Training for the Upper Limb after Stroke (RATULS): A 770 Stroke Patients Study- Kinematics & Kinetics Results  
Hermano Igo Krebs [United States]

10:15–10:45

Room 3

**ISPRM/JARM Special Lecture 8: Development of Assistive Technologies to Enhance Quality of Life in the Elderly and Persons with Impairments**

Chair: Naoshi Ogata [Japan]

- SL8-1** Development of Assistive Technologies to Enhance Quality of Life in the Elderly and Persons with Impairments  
Fumihito Tajima [Japan], Yasuo Mikami, Kanji Fukuda, Ryuichi Saura, Akira Kido

10:15–11:15

Room 4

**ISPRM/JARM English Session 1**

Chair: Shinichi Wada [Japan]

- 0-4-1-1** Effect of Individualized Rehabilitation Education on Swallowing Function in Patients with Dysphagia  
Wang Ping [China], Xu Qian, Chen Yunjia
- 0-4-1-2** Effect of Low Frequency Transcranial Magnetic Stimulation Combined with Kinesio Taping Efficacy on Post-Stroke Dysphagia  
Yi Yi Chen [China], Qian Xu, Jiayi Xia, Qian Zhang, Yao Lu, Yun Jia Chen, Ping Wang, Xiao Wen Dai, Xuemei Qiu, Yanqin Gu
- 0-4-1-3** Swallow-Feeding Management Prevents of Post-Stroke Pneumonia in Patients with Dysphagia in Stroke Units  
Meihong Zhu [China], Meifang Shi, Xudong Gu, Yunhai Yao, Jianming Fu, Zhongli Wang, Ming Zeng
- 0-4-1-4** The Effect of Dantrolene on Swallowing: A Retrospective Review  
Anne Kuwabara [United States], Kazuko Shem
- 0-4-1-5** Successful Laryngeal Suspension for Severe Dysphagia After Resection of Esophageal Schwannoma: A Patient Report  
Haruhi Inokuchi [Japan], Asako Kaneoka, Nobuhiko Haga

10:15–11:15

Room 7

**Freepapers 12: Virtual Reality**Chairs: **Isabelle Laffont** [France]**Dilsad Sindel** [Turkey]

<b>O12-1</b> 10:15	<b>Comparison of the Effectiveness of Virtual Reality and a Home-Based Program Following Surgery for Flexor Tendon Injuries of the Hand</b> <b>Dilsad Sindel</b> [Turkey], Gulsah Gula, Aydan Oral, Sina Esmaeilzadeh, Safiye Ozkan, Atakan Aydin
<b>O12-2</b> 10:25	<b>Influence of New Technologies on Post-stroke Rehabilitation: A Comparison of Virtual Reality and Robot-assisted Trainings</b> <b>Ausra Adomaviciene</b> [Lithuania], Kristina Daunoraviciene, Ruta Dadeliene, Jurate Kesiene
<b>O12-3</b> 10:35	<b>The Effect of Virtual Reality Rehabilitation System with Wearable IMU Sensors on Upper Limb Functions in Children with Brain Injury</b> <b>Ja Young Choi</b> [South Korea], Sook-Hee Yi, Lijuan Ao, Xin Tang, Xuan Xu, Dain Shim, Beomki Yoo, Dong-Wook Rha
<b>O12-4</b> 10:45	<b>Rehabilitation of the Upper limb with Adaptive Serious Games in Sub Acute Stroke Compared to Conventional Rehabilitation: A Randomized Controlled Trial</b> <b>Isabelle Laffont</b> [France], Jerome Froger, Claire Jourdan, Audrey Jaussent, Liesjet Van Dokkum, Emmanuelle Le Bars, Arnaud Dupeyron, Denis Mottet
<b>O12-5</b> 10:55	<b>Investigation of Virtual Reality Based Brain Computer Interface in Chronic Stroke Patients: A Feasibility Study</b> <b>Rongrong Lu</b> [China], Tianhao Gao, Jie Li, Gang Liu, Songhua Huang, Yi Wu
<b>O12-6</b> 11:05	<b>Feasibility of Using Eye Tracking System to Assess Spatial Neglect of Stroke Patients During Upper Limb Exoskeleton Training Associated with Virtual Reality</b> <b>Marcel Simis</b> [Brazil], Eduardo Maki, Joao P Tavares, Linamara R. Battistella

10:15–11:15

Room 8

**Freepapers 15: Gait**Chairs: **Marco Franceschini** [Italy]**Izumi Kondo** [Japan]

<b>O15-1</b> 10:15	<b>Effect of Trailing Limb Angle on Propulsion Force and Knee Flexion Angle during Gait in Community-dwelling Older People</b> <b>Takasuke Miyazaki</b> [Japan], Ryoji Kiyama, Hyuma Makizako, Masayuki Kawada, Yasufumi Takeshita, Yuki Nakai, Kazunori Yone, Takuro Kubozono, Toshihiro Takenaka, Mitsuru Ohishi
<b>O15-2</b> 10:25	<b>Effect of Ankle Foot Orthosis and Handrail on Toe Clearance in Hemiparetic Walking</b> <b>Kei Ohtsuka</b> [Japan], Masahiko Mukaino, Kazuhiro Tsuchiyama, Fumihiro Matsuda, Junya Yamada, Ryo Murakami, Eiichi Saitoh

**O15-3** **Changes in Time Factors and Gait Pattern Transition from Three-point Gait to Two-point Gait in Stroke Hemiparetic Gait**  
10:35  
[Fumihiko Matsuda](#) [*Japan*], Masahiko Mukaino, Kei Ohtsuka, Masahiro Hidaka, Junya Yamada, Shigeo Tanabe, Eiichi Saitoh

**O15-4** **The Physiological Mechanism of Gait Improvement with Rhythmic Sound Stimulation in Patients with Parkinson's Disease -fMRI Study-**  
10:45  
[Daisuke Nishida](#) [*Japan*], Katsuhiko Mizuno, Emi Yamada, Meigen Liu

**O15-5** **Effect of Gait Training Using Hybrid Assistive Limb on Gait Ability and the Risk of Exercise-induced Muscle Injury in Patients with Myopathy**  
10:55  
[Eiichi Tsuda](#) [*Japan*], Kazutomo Miura, Masakazu Kogawa, Ayaka Fujita

**O15-6** **Subacute Stroke Gait Rehabilitation with an Overground Exoskeleton: Preliminary Results of a RCT Multicentre Study**  
11:05  
[Marco Franceschini](#) [*Italy*], Michela Goffredo, Sanaz Pournajaf, Daniele Galafate, Silvano Baratta, Serena Filoni, Eleonora Guanziroli, Carlo Damiani, Franco Molteni

10:15–11:15

**Room 9**

## Freepapers 18: Cognitive Impairment I

Chairs: [Yun-Hee Kim](#) [*South Korea*]  
[Shinichiro Maeshima](#) [*Japan*]

**O18-1** **Face Validity of a Multiple Intelligences Instrument for Spanish Speaking Young Adults with Intellectual Disability**  
10:15  
[Mario A. Giraldo-Prieto](#) [*Colombia*], Doris Ramirez, Carlos Quintero, Diego Pereira, Melisa Zuluaga, Paola Soto, Carolina Lopera, Vanessa Seijas, Alejandra Vanegas, Catalina Ocampo, Marcela Yepes, Maria-Teresa Rugeles, Luz Helena Lugo

**O18-2** **Imaging Marker for Cognitive Impairment Due to Cerebral White Matter Lesions Based on Skeletonization of White Matter Tracts and Diffusion Histograms**  
10:25  
[Na Wei](#) [*China*], Jinfang Wang, Yuesong Pan, Yumei Zhang, Yongjun Wang

**O18-3** **Efficacy of Cognitive Stimulation Therapy on the Cognition of Patients with Vascular Cognitive Impairment: A Pilot Randomized Controlled Trial**  
10:35  
[Naoki Mori](#) [*Japan*], Yohei Otaka, Kaoru Honaga, Kunitsugu Kondo, Daisuke Matsuura, Meigen Liu

**O18-4** **Is Post-stroke Lateropulsion a Kind of Gravitceptive Neglect?**  
10:45  
[Shenhao Dai](#) [*France*], Celine Piscicelli, Camille Lemaire, Emmanuelle Clarac, Patrice Davoine, Anne Chrispin, Monica Baci, Dominic Perennou

**O18-5** **Assessment of Recovery from Unilateral Spatial Neglect: Behavioral Inattention Test Contrasted with Multi-Length Line Bisection**  
10:55  
[Corinne Serfaty](#) [*Israel*], Shai Ofir, Nachum Soroker

**O18-6** **Comparison of Perceived Post-stroke Difficulties in Patients with Aphasia, Their Caregivers and the Healthcare Providers**  
11:05  
[Bertrand Glize](#) [*France*], Melanie Cogne, Valentine Percey, Pierre Charaire, Helene Cassoudesalle, Patrick Dehal, Mathieu De Seze, Antoinette Prouteau, Christian Belio, Igor Sibon, Mathilde Carlsberg

10:15–12:15

Room 10

**ISPRM Session 10: Innovative Evidence-Based Rehabilitation for Common Problems in Women**Chairs: **Areerat Suputtitada** [Thailand]**Carl P.C. C Chen** [Taiwan]

<b>IS10-1</b>	<b>Update in Breast Cancer Rehabilitation</b> Fary Khan [Australia]
<b>IS10-2</b>	<b>Issues Specific to Women with Spinal Cord Injury: An Update</b> Charlotte Kiekens [Belgium]
<b>IS10-3</b>	<b>Higher Brain Dysfunction in Women</b> Toyoko Asami [Japan], Marie Tasaki, Shigenobu Ono, Kazuki Murata
<b>IS10-4</b>	<b>Cardiopulmonary Problems in Women</b> Merce Avellanet [Spain]
<b>IS10-5</b>	<b>Noninvasive Neuromodulations for Specific Problems in Women with Fibromyalgia</b> Areerat Suputtitada [Thailand]
<b>IS10-6</b>	<b>Ultrasound Guidance Injection for Pelvic Pain</b> Carl P.C. C Chen [Taiwan]
<b>IS10-7</b>	<b>Pelvic Pain Management</b> David Cassius [United States]

10:15–11:15

Room 11

**Short Workshop 35: Ultrasound-Guided Common and Uncommon Nerve Blocks with Alcohol for Spasticity Management**Chair: **Yuxi Chen** [United States]

<b>SW35-1</b>	<b>Ultrasound-Guided Common and Uncommon Nerve Blocks with Alcohol for Spasticity Management</b> Heakyung Kim [United States]
<b>SW35-2</b>	<b>Ultrasound-Guided Common and Uncommon Nerve Blocks with Alcohol for Spasticity Management</b> Mooyeon Oh-Park [United States]

---

10:45–11:15

Room 2

**ISPRM/JARM Special Lecture 2: Going Back to the Basics: Mechanisms of Motor Recovery after Stroke**

Chair: Eiichi Saitoh [Japan]

**SL2-1** Going Back to the Basics: Mechanisms of Motor Recovery after Stroke  
Pablo A. Celnik [United States]

---

10:45–11:15

Room 3

**ISPRM/JARM Special Lecture 9: Exercise Therapy for Spinal Disorders in the Elderly**

Chair: Kazuomi Sugamoto [Japan]

**SL9-1** Exercise Therapy for Spinal Disorders in the Elderly  
Yoichi Shimada [Japan]

---

11:30–12:00

Room 2

**ISPRM/JARM Special Lecture 3: Emerging Issues Related with Aging in Cerebral Palsy**

Chair: Shin-Ichi Izumi [Japan]

**SL3-1** Emerging Issues Related with Aging in Cerebral Palsy  
Moon Suk Bang [South Korea]

---

11:30–12:00

Room 3

**ISPRM/JARM Special Lecture 10: The Effectiveness of Aerobic Exercise Combined with Noninvasive Positive Pressure Ventilation**

Chair: Eiichi Tsuda [Japan]

**SL10-1** The Effectiveness of Aerobic Exercise Combined with Noninvasive Positive Pressure Ventilation  
Takeshi Nakamura [Japan]

---

11:30–12:30

Room 4

**ISPRM/JARM English Session 2**

Chair: Noriaki Hattori [Japan]

**0-4-2-1** Effect of rTMS Combined with Mandatory Motor Therapy on Upper Limb function Recovery in Stroke Patients with Hemiplegia  
Zhu Chen [China], Yong Sun, Qian Xu, Qian Zhang, Ping Wang

**0-4-2-2** Effect of Scalp Acupuncture Combined with rTMS on Language Function in Patients with Non-Fluent Aphasia  
Zhu Chen [China], Yong Sun

<b>0-4-2-3</b>	<b>A Review About the Effect of Transcranial Direct Current Stimulation[tDCS]on Upper Limb and Hand Function in Patients with Chronic Stroke</b> <a href="#">Wang Chuankai</a> [China], Jie Jia
<b>0-4-2-4</b>	<b>Effects of Transcranial Direct Current Stimulation Combined with Melodic Intonation Therapy Treatment on Picture naming in Non-Fluent Aphasia</b> <a href="#">Qian Zhang</a> [China], Qian Xu, Zhu Chen, Ping Wang, Yao Lu, Yi Yi Chen, Xuemei Qiu, Yun Jia Chen, Yanqin Gu, Xiao Wen Dai, Jiayi Xia, Chunlei Shan
<b>0-4-2-5</b>	<b>Effects of Low Frequency Transcutaneous Electric Acupoint Stimulation[TEAS]on Upper Limb and Hand function in Patients with Chronic Stroke</b> <a href="#">Wang Chuankai</a> [China], Jie Jia
<b>0-4-2-6</b>	Cancelled
<b>0-4-2-7</b>	<b>Application Study of Surface Electromyographic Biofeedback Therapy and Detection of Surface Electromyography for Stroke Patients with Dysphagia</b> <a href="#">Hongfei Qiao</a> [China], Qiaojun Zhang, Haifeng Yuan, Wenjuan Li, Hui Zhang, Jing Fu

11:30–12:30

Room 7

**Freepapers 13: Spinal Cord Injury**

Chairs: [Shinsuke Katoh](#) [Japan]  
[Toshiki Matsunaga](#) [Japan]

<b>013-1</b> 11:30	<b>Effect of Exercise and Rehabilitation with or without ChABC Administration to Microglia in Rats with Acute Spinal Cord Injury</b> <a href="#">Kota Asano</a> [Japan], Takeshi Nakamura, Kengo Funakoshi
<b>013-2</b> 11:40	<b>The Amelioration of Pain-related Behavior in Chronic Spinal Cord Injury Model Mice Treated with Neural Stem/Progenitor Cell Transplantation Combined with Treadmill Training</b> <a href="#">Syoichi Tashiro</a> [Japan], Soraya Nishimura, Munehisa Shinozaki, Meigen Liu, Hideyuki Okano, Masaya Nakamura
<b>013-3</b> 11:50	<b>Efficiency and Effectiveness of Combined Cell Therapy in Spinal Cord Injury Patients</b> <a href="#">Maria T Moviglia Brandolino</a> [Argentina], Samanta C Piccone, Damian Couto, Gustavo A Moviglia
<b>013-4</b> 12:00	<b>Chronic Disease and Psychological Morbidity among Adults with Non-traumatic Spinal Cord Injuries</b> <a href="#">Mark D. Peterson</a> [United States], Anthony Chiodo, Denise Tate, Neil Kamdar
<b>013-5</b> 12:10	<b>Changing Epidemiological Characteristics of Traumatic Spinal Cord Injury Patients in Turkey: 1990-1995 vs. 2010-2015</b> <a href="#">Gulumser Aydin</a> [Turkey], Sibel D Ozbudak, Hulya Sirzai
<b>013-6</b> 12:20	<b>Electroencephalography as a Biomarker of Impairment and Functional Recovery in Spinal Cord Injury Patients</b> <a href="#">Marcel Simis</a> [Brazil], Felipe Fregni, Linamara R. Battistella



**Freepapers 16: Injection**Chairs: **Po-Ling Kuo** [*Taiwan*]**Yasuo Mikami** [*Japan*]

<b>O16-1</b> 11:30	<b>Treatment Outcomes of Ultrasound Guided Steroid Injection and Physical Therapy in Patients with Coccydynia</b> <b>Volkan Yilmaz</b> [ <i>Turkey</i> ], Ebru Umay
<b>O16-2</b> 11:40	<b>Comparison of Ultrasound-guided Injection of Corticosteroid Versus Hyaluronic Acid in the Treatment of Plantar Fasciitis: A 6 Month Randomized Clinical Trial</b> <b>Seyed Ahmad Raeissadat</b> [ <i>Iran</i> ], Farshad Nouri, Mahtab Darvish
<b>O16-3</b> 11:50	<b>Effect of Ultrasound-guided Drug Injection of Shoulder Joint for the Treatment of CRPS after Stroke</b> <b>Huixian Yu</b> [ <i>China</i> ]
<b>O16-4</b> 12:00	<b>Nerve Hydrodissection and Dextrose Perineural Injection for Carpal Tunnel Syndrome</b> <b>Yung-Tsan Wu</b> [ <i>Taiwan</i> ], Ming-Jen Ke, Tsung-Yen Ho, Tsung-Ying Li, Yu-Ping Shen, Si-Ru Chen, Liang-Cheng Chen
<b>O16-5</b> 12:10	<b>Hypertonic Dextrose Prolotherapy in the Treatment of Tendinopathy: A Systematic Review and Meta-analysis</b> <b>Lixia Jin</b> [ <i>China</i> ], Fang Li, Chang Jiang
<b>O16-6</b> 12:20	<b>Automated Nerve Tracking in Dynamic Sonography Using Instance Segmentation</b> <b>Po-Ling Kuo</b> [ <i>Taiwan</i> ], Wei-Ting Syu, Chueh-Hung Wu, Meng-Ting Lin, Mathieu Boudier Reveret, Ming-Yen Hsiao

**Freepapers 19: Cognitive Impairment II**Chairs: **Deog Young Kim** [*South Korea*]**Aiko Osawa** [*Japan*]

<b>O19-1</b> 11:30	<b>Physical Performance and the Evolution of Depressive Symptoms in Community-dwelling Older Adults with Spontaneous Memory Complaints</b> <b>Eiko Takano</b> [ <i>France</i> ], Izumi Kondo, Mathieu Maltais, Philippe S Barreto, Bruno Vellas
<b>O19-2</b> 11:40	<b>Combination of Cerebrolysin and Occupational Therapy for the Rehabilitation of Men and Women with Post-stroke Depression, Who Refused from Treatment with Antidepressants</b> <b>Aleksei Andreevich Shmonin</b> [ <i>Russia</i> ], Maria Nikolaevna Maltseva, Elena Valentinovna Melnikova
<b>O19-3</b> 11:50	<b>Early Support for Patients with Cognitive Impairment after Brain Damage to Return to Active Driving</b> <b>Hisaya Higashi</b> [ <i>Japan</i> ], Toru Kawamoto, Sadaharu Esaki, Takafumi Kimura

**O19-4** 12:00 **A Randomised Controlled Trial on the Effect of Cognitive Rehabilitation for Attention in Mild Traumatic Brain Injury (mTBI)**  
 Norhamizan Hamzah [Malaysia], Nor Atikah Mustapha, Nur Adibah Mohd Tahir, Vairavan Narayanan, Norlisah Ramli, Li Kuo Tan, Avril Drummond Drummond, Roshan Das Nair, Mazlina Mazlan

**O19-5** 12:10 **Improvement of Psychological Disorders in Patients with Mild Traumatic Brain Injury after Combining Cognitive Rehabilitation and Psychological Care**  
 Bertrand Glize [France], Melanie Cogne, Valerie Perdrieau, Elodie Guillouet, Aurelie Granger, Helene Defferriere, Maryame Gatineau-Sailliant, Clemence Lefevre, Philippe Decq, Philippe Azouvi

**O19-6** 12:20 **Quantitative Analysis on Correlation between Cognitive Impairment and Cerebral White Matter Hyperintensity on FLAIR Sequence**  
 Yumei Zhang [China], Huixian Yu, Hongyan Chen

11:30–12:30

Room 11

## Freepapers 22: Dysphagia II

Chairs: Yoichiro Aoyagi [Japan]  
 Haruhi Inokuchi [Japan]

**O22-1** 11:30 **Characteristics of Post-esophagectomy Dysphagia: a Videofluoroscopic Study**  
 Asako Kaneoka [Japan], Haruhi Inokuchi, Rumi Ueha, Takao Goto, Taku Sato, Takaharu Nito, Yasuyuki Seto, Nobuhiko Haga

**O22-2** 11:40 **Effect of a Speaking Valve on Biomechanical Properties of Swallowing and the Upper Airway Flow Characteristics for Tracheotomized Patients after Acquired Brain Damage**  
 Zulin Dou [China]

**O22-3** 11:50 **How Viscosity and Volume of a Bolus Affects Esophageal Motility during Swallowing? -a Study Using High Resolution Manometry-**  
 Yoichiro Aoyagi [Japan], Sayuri Imaeda, Yuri Nakazawa, Hiroshige Taniguchi, Makoto Hirimura, Hitoshi Kagaya, Seiko Shibata, Eiichi Saitoh

**O22-4** 12:00 **Risk Factors for Dysphagia after Cervical Decompression and Fusion**  
 Haruhi Inokuchi [Japan], Asako Kaneoka, Nobuhiko Haga

**O22-5** 12:10 **Upper Esophageal Sphincter Pressure at Rest during Magnetic Stimulation of Suprahyoid Muscles in Healthy Individuals**  
 Hitoshi Kagaya [Japan], Keiko Aihara, Mao Ogawa, Yuki Nagashima, Yoichiro Aoyagi, Shino Mori, Fumi Toda, Seiko Shibata, Yoko Inamoto, Keiko Onogi, Eiichi Saitoh

**O22-6** 12:20 **A Randomized Controlled Trial of Repetitive Peripheral Magnetic Stimulation for Strengthening Suprahyoid Muscles**  
 Mao Ogawa [Japan], Hitoshi Kagaya, Yuki Nagashima, Shino Mori, Seiko Shibata, Yoko Inamoto, Yoichiro Aoyagi, Fumi Toda, Eiichi Saitoh

---

12:00–12:30

**Room 2**

**ISPRM/JARM Special Lecture 4: Rehabilitation for Adults with Severe Upper-extremity Impairment after Stroke**

Chair: **Yuki Uchiyama** *[Japan]*

**SL4-1**     **Rehabilitation for Adults with Severe Upper-extremity Impairment after Stroke**  
**Gitendra Uswatte** *[United States]*

---

12:00–12:30

**Room 3**

**ISPRM/JARM Special Lecture 11: Renal Rehabilitation: a Novel Area which Contributes to 13 Million People in Japan**

Chair: **Kozo Hanayama** *[Japan]*

**SL11-1**     **Renal Rehabilitation: a Novel Area which Contributes to 13 Million People in Japan**  
**Masahiro Kohzaki** *[Japan]*

---

12:50–13:50

**Room 2**

**Luncheon Seminar 7: Robot Rehabilitation for Upper Limb Paralysis**

Sponsor: **Teijin Pharma Limited**

Chair: **Kazuhisa Domen** *[Japan]*

**LS7-1**     **Robot Rehabilitation for Upper Limb Paralysis**  
**Takashi Takebayashi** *[Japan]*, Kayoko Takahashi, Satoru Amano

---

12:50–13:50

**Room 3**

**Luncheon Seminar 8: A Gait Exercise Assist Robot for Hemiplegia**

Sponsor: **Toyota Motor Corporation**

Chair: **Toshikazu Kubo** *[Japan]*

**LS8-1**     **A Gait Exercise Assist Robot for Hemiplegia**  
**Eiichi Saitoh** *[Japan]*

---

12:50–13:50

**Room 4**

**Luncheon Seminar 9: Community-Based Rehabilitation with Robotic Technology in Toyota City**

Sponsor: **Toyota City, Department of Community-Based Rehabilitation with Robotic Technology, Fujita Health University, Toyota Regional Medical Center**

Chair: **Hitoshi Kagaya** *[Japan]*

**LS9-1**     **Community-Based Rehabilitation with Robotic Technology in Toyota City**  
**Toshihiko Ota** *[Japan]*, **Kikuo Ota** *[Japan]*

---

12:50–13:50

Room 5

**Luncheon Seminar 10: Primary Care for Low Back Pain -Exercise Therapy and ADL Instruction-**

Sponsor: airweave inc.

Chair: Yohei Otaka [Japan]

**LS10-1** Primary Care for Low Back Pain -Exercise Therapy and ADL Instruction-  
Koji Kaneoka [Japan]

14:00–14:30

Room 2

**ISPRM/JARM Special Lecture 5: Physiological Ischemic Training: Innovation of Ischemic Diseases**

Chair: Masahiro Kohzuki [Japan]

**SL5-1** Physiological Ischemic Training: Innovation of Ischemic Diseases  
Jianan Li [China], Xiao Lu

14:00–14:30

Room 3

**ISPRM/JARM Special Lecture 12: History of Rehabilitation Medicine in Japan**

Chair: Masazumi Mizuma [Japan]

**SL12-1** History of Rehabilitation Medicine in Japan  
Toshikazu Kubo [Japan], Tsuyoshi Goto, Motoyuki Horii, Koshiro Sawada, Yuji Arai, Yasuo Mikami

14:00–15:00

Room 4

**ISPRM/JARM English Session 3**

Chair: Shinichiro Maeshima [Japan]

**0-4-3-1** The clinical Efficacy of Kinesio Taping Based on Embodied Cognition Combined with Speech Training for Speech Apraxia with Facial Apraxia in Stroke Patients  
Zhu Chen [China], Yong Sun

**0-4-3-2** Research Progress on the Relationship Between Speech and Hand Movement  
Yongquan Pan [China], Jie Jia

**0-4-3-3** Core Muscle Strength Training with Huber and Traditional Rehabilitation Training on Balance Function and Walking Ability of Hemiplegic Patients a Randomized Controlled Study  
Quan Xu [China], Yu Pan, Li Li Zou

**0-4-3-4** The Safety of Tai Chi: A Meta-Analysis of Randomized controlled Trials  
Hua Cui [China], Shaojun Lv

**0-4-3-5 Study on Standardized Test of Infant Strength Assessment**

[Siqin Zeng](#) [China], Mei Wang

**0-4-3-6 Methods of Sports Rehabilitation for Adolescent Idiopathic Scoliosis**

[Siqin Zeng](#) [China], Mei Wang

**0-4-3-7 A Case Study of Motor Therapy for ACL Injury**

[Qiu Nie](#) [China], Jian Chen

14:00–15:00

**Room 7**

**Freepapers 14: Pain**

Chairs: [Sun Gun Chung](#) [South Korea]

[Yukihide Nishimura](#) [Japan]

**O14-1 A Comparative Study on Lumbar Stability during Static Motions of Low Back Pain Patients versus Healthy Population**

14:00

[Cheol Ki Kim](#) [South Korea], Beom Suk Kim, Sung Joon Chung, Yechan Park, Seung Min Lee, Kee Won Kim, Sun Gun Chung

**O14-2 Lumbar Stability during Dynamic Motions of Low Back Pain Patients versus Healthy Subjects**

14:10

[Cheol Ki Kim](#) [South Korea], Beom Suk Kim, Sung Joon Chung, Yechan Park, Seung Min Lee, Kee Won Kim, Sun Gun Chung

**O14-3 Effectiveness of Spinal Manipulative Therapy for Chronic Low-back Pain (Systemic Review)**

14:20

[Kholoud A. AL-Homoud](#) [Saudi Arabia]

**O14-4 Cervical Pain in Health Professionals: a Randomised Cross Over Trial of a New Postural Garment versus Exercises**

14:30

[Merce Avellanet](#) [Spain], Anna Boada, Jean Claude Perrot, Laura Loro, David Monterde, Josep Romagosa, Elvira Gea

**O14-5 Measuring Cervical Range of Motion with Gyroscope/Accelerometer Eyeglasses (JINES MEME) in Persons with and without Neck Pain**

14:40

[Kimio Saito](#) [Japan], Karina Del Rosario, Nagao Masato, Lisa Pascual, Saam Morshed, Yoichi Shimada

**O14-6 The Effect of Low Frequency Magnetic Field (LFMF) on Pain Intensity in Patients with Diabetic Peripheral Neuropathy**

14:50

[Teuta Osmani-Vllasolli](#) [Albania], Arijana Kalaveshi, Ardiana Murtezani

14:00–15:00

Room 8

**Freepapers 17: Botulinum Toxin**

Chairs: Masahiko Mukaino [Japan]

Ozoua Elodie Ble [France]

- 017-1**      **AbobotulinumtoxinA: Adult Upper Limb and Lower Limb Results in Spasticity**  
14:00  
Alberto Esquenazi [United States], Jean-Michel Gracies, Sylvie Guillory, Claire Vilain, Philippe Picaut
- 017-2**      **OnabotulinumtoxinA Treatment for Spasticity Reduces Disability Outcomes in Treatment-Naïve Patients and Reduces Caregiver Burden: Results from the ASPIRE Study**  
14:10  
Alberto Esquenazi [United States], Wolfgang H. Jost, Aaron L. Ellenbogen, George F. Wittenberg, Kenneth Ngo, Joan Largent, Aleksej Zuzek, Gerard E. Francisco
- 017-3**      **Importance of Optimal Treatment with OnabotulinumtoxinA to Detect Global Improvements in Pediatric Upper Limb Spasticity**  
14:20  
Darcy Fehlings [Canada], Mark Gormley, Heakyung Kim, Katharine E. Alter, Chengcheng Liu, Emily McCusker, Rozalina Dimitrova
- 017-4**      **AntiCoTox: a French National Survey about the Management of Patients under Antithrombotic Drugs Requiring Intramuscular Botulinum Toxin Injections for the Treatment of Spasticity**  
14:30  
Ozoua Elodie Ble [France], Djamel Ben Smail, François Boyer, Pierre-Alain Joseph, Bernard Parratte, Dominique Perennou, Thibaud Lansaman, Jonathan Levy
- 017-5**      **The Effect and Mechanism of Microglial Activation in Post Stroke Spasticity**  
14:40  
Yao Liu [China], Ya Zhou, Juan Li Ao, Li Wen Wang, Xian Mo Chen
- 017-6**      **The Analysis of Time Course of Spasticity Development Using Quantitative Spasticity Measurement Device**  
14:50  
Masahiko Mukaino [Japan], Shota Ito, Hiroki Tanikawa, Hikaru Kondo, Kenta Fujimura, Kei Ohtsuka, Hitoshi Kagaya, Eiichi Saitoh

14:00–15:30

Room 9

**Freepapers 20: Knee and Hip**

Chairs: Eiichi Tsuda [Japan]

Moshiur Rahman Khasru [Bangladesh]

Takaaki Aoki [Japan]

- 020-1**      **The Effect of Prophylactic Knee Taping on Knee Joint Biomechanics and Function**  
14:00  
Di Xie [China], Wenxing Zhou, Wenjing Ma, Ning Mao, Haimei Wang, Xiao Shi Shi, Bin Ma
- 020-2**      **Peripheral Blood Derived Stem Cells in Primary Osteoarthritis of Knee at Low Resources Setting: Interim Report of a Phase II Pilot RCT**  
14:10  
Moshiur Rahman Khasru [Bangladesh], Tangila Marzen, Md Ashrafur Islam, Khandakar Mohammad Hossain, Mohammad Jahir

<b>O20-3</b> 14:20	<b>Altered Resting State Functional Connectivity of the Anterior Insula Cortex in Female Patients with Chronic Severe Knee Osteoarthritis</b> <a href="#">Kai Ushio</a> [Japan], Kazuyoshi Nakanishi, Yukio Mikami, Hiroaki Kimura
<b>O20-4</b> 14:30	<b>The Role of Posture and Body Balance Exercise towards Balance and Knee Function in Obese Patients with Knee Osteoarthritis</b> <a href="#">Tirza Z Tamin</a> [Indonesia], Regie Santoso
<b>O20-5</b> 14:40	<b>Comparison of Dextrose Prolotherapy, Corticosteroid &amp; Ketorolac Injection Effects in Patients with Knee OA -Randomised Clinical Trial</b> <a href="#">Masoomah Bayat</a> [Iran], Maryam Sadat Mortazavian Babaky, Zahra Razzaghi
<b>O20-6</b> 14:50	<b>Changes in the Gait Pattern in Patients of Different Severity Levels in Knee Osteoarthritis</b> <a href="#">Chuan-Hsin Yen</a> [Taiwan], Shuo-Suei Hung, Wen-Yin Chen, Shaw-Ruey Lyu, Jing-Jong Chen
<b>O20-7</b> 15:00	<b>The Differences in Physical Functions Necessary for Discharge to Home after Hip Fracture on Pre-injury Residence Area</b> <a href="#">Yuta Suzuki</a> [Japan], Yukio Urabe, Noriaki Maeda, Junpei Sasadai, Taizan Shirakawa
<b>O20-8</b> 15:10	<b>Functional Outcome a Half-year after Hip Fracture in the Elderly People</b> <a href="#">Ai Takahashi</a> [Japan], Hiroaki Naruse, Ippei Kitade, Seiichiro Shimada, Misao Tsubokawa, Tomoko Yamaguchi, Yasuo Kokubo, Akihiko Matsumine
<b>O20-9</b> 15:20	<b>Walking with a Cane Provides Pain Relief and Reduces Joint Loading in Patients with Hip Osteoarthritis</b> <a href="#">Masayuki Tazawa</a> [Japan], Naoki Wada, Minoru Kurosaki, Yoko Ibe

14:00–15:30

**Room 10**

**Joint Session 5: Joint Session JARM: Lessons from the History of Rehabilitation Medicine**

Chairs: [Joel A. DeLisa](#) [United States]

[Changil Park](#) [South Korea]

<b>JS5-1</b>	<b>History of Rehabilitation Medicine in Japan</b> <a href="#">Naichi Chino</a> [Japan]
<b>JS5-2</b>	<b>Factors Affecting the Development of Rehabilitation Medicine in Korea; Historical Perspective</b> <a href="#">Tai Ryoan Han</a> [South Korea]
<b>JS5-3</b>	<b>Lessons from the History of PM&amp;R: USA</b> <a href="#">John L. Melvin</a> [United States]
<b>JS5-4</b>	<b>Lessons from the History of Rehabilitation Medicine in Malaysia</b> <a href="#">Zaliha B Omar</a> [Malaysia]
<b>JS5-5</b>	<b>Lessons from the History of Rehabilitation Medicine</b> <a href="#">Lee Laycock</a> [Australia]

14:00–15:30

Room 11

**ISPRM Session 11: Disaster Management: Critical Role of Medical Rehabilitation**

Chair: Fary Khan [Australia]

**IS11-1 Perspectives of Japan Disaster Rehabilitation**

Shinsuke Katoh [Japan]

**IS11-2 Establishment of PM&R Service in Pakistan for Survivors of Disasters**

Nabila Najam Soomro [Pakistan]

**IS11-3 Disaster Rehabilitation: Lessons Learnt in Marawi Philippines**

Filipinas G Ganchoon [Philippines]

14:00–17:15

Room 18

**Hands-on Seminar 2: Introduction to Effective Swallowing Protocol (ESP) - Combination of Neuromuscular Electrical Stimulation (NMES) and Exercise Therapy-**

Sponsor: ITO CO., LTD.

Lecturers: Rick McAdoo [United States]

Sachiko Abiko [Japan]

Hiroto Hayashi [Japan]

14:30–15:00

Room 2

**ISPRM/JARM Special Lecture 6: Spinal Cord Injuries – The Past and Future: New Zealand & Global Perspective**

Chair: Masuo Senda [Japan]

**SL6-1 Spinal Cord Injuries – The Past and Future: New Zealand & Global Perspective**

Xianghu Xiong [New Zealand]

14:30–15:00

Room 3

**ISPRM/JARM Special Lecture 13: Multidisciplinary Approach for Children with Congenital Lower Limb Deficiencies**

Chair: Satoru Saeki [Japan]

**SL13-1 Multidisciplinary Approach for Children with Congenital Lower Limb Deficiencies**

Nobuhiko Haga [Japan]



15:00–15:30

Room 2

### ISPRM/JARM Special Lecture 7: New Application of F-wave Study

Chair: **Yoshihisa Masakado** [Japan]

**SL7-1** New Application of F-wave Study  
[Jun Kimura](#) [United States]

16:30–18:00

Room 7

### Special Session 24: Rehabilitation of the Consciousness: Assessment Scales and Treatments

Chairs: **Amiram Cats** [Israel]  
**Anna Oksamitni** [Israel]

**SS24-1** Rehabilitation of the Consciousness: Assessment Scales and Treatments - Physician  
16:30 [Anna Oksamitni](#) [Israel]

**SS24-2** Rehabilitation of the Consciousness; Assessment Scales and Treatments in Occupational and Physical Therapy  
16:55 [Hiela Lehrer](#) [Israel]

**SS24-3** Rehabilitation of the Consciousness: Assessment Scales and Treatments - Nursing  
17:20 [Dafna Nuriel](#) [Israel]

**SS24-4** Rehabilitation of the Consciousness: Assessment Scales and Treatments - Speech-Language  
17:45 [Gal Cohen](#) [Israel]

16:30–18:00

Room 9

### Freepapers 21: Activities of Daily Living

Chairs: **Shigeru Sonoda** [Japan]  
**Steven Faux** [Australia]  
**Mari Nakano** [Japan]

**O21-1** Relationship among Motor Subscore of the FIM(mFIM) on Admission, mFIM Gain in Two Weeks from Admission, and mFIM Gain until Discharge in Stroke Patients  
16:30 [Yoshitaka Wada](#) [Japan], Shigeru Sonoda, Makoto Watanabe, Sayaka Okamoto, Kie Yagihashi, Hideto Okazaki, Eiichi Saitoh

**O21-2** The Baseline Score of ABMS2 can be the Predictor for Functional Outcome, Length of Stay and Discharge Destination in Stroke Patients  
16:40 [De Gang Yang](#) [Japan], Rui Gu, Wataru Kakuda, Shin Sato, Mitsuhiro Sano, Chiharu Yashima, Junichi Eguchi, Masashi Kawaguchi, Takeki Ishida, Fei Zheng

**O21-3** Adaptation and Validation of the Japanese Self-report Version of the Spinal Cord Independence Measure  
16:50 [Sho Takeuchi](#) [Japan], Osamu Uemura, Kei Unai, Meigen Liu

<b>O21-4</b> 17:00	<b>Factors Affecting Discharge to Home after Surgery for Spinal Metastasis: Analysis Using a National Inpatient Database</b> <a href="#">Ryoko Sawada</a> [Japan], Hayato Yamana, Yusuke Shinoda, Takahiro Ohki, Hideo Yasunaga, Nobuhiko Haga
<b>O21-5</b> 17:10	<b>Relationship between Physical Frailty and Activities of Daily Living in Persons with Respiratory Disease</b> <a href="#">Shigenori Hiraoka</a> [Japan], Yoichiro Aoyagi, Yuji Kono, Michiko Taya, Kanan Yatsuya, Eriko Mizokoshi, Chen Hui, Hitoshi Kagaya, Eiichi Saitoh
<b>O21-6</b> 17:20	<b>Longitudinal Study on Activity Monitoring for Over 24 Hours among Patients in a Rehabilitation Ward</b> <a href="#">Hirotaka Matsuura</a> [Japan], Masahiko Mukaino, Yasushi Aoshima, Ayaka Inukai, Emi Hattori, Yurie Yamada, Masaki Kato, Yuki Okochi, Takayuki Ogasawara, Eiichi Saitoh
<b>O21-7</b> 17:30	<b>Prediction of Life-Space Mobility in Patients with Stroke 2 Months after Discharge from Rehabilitation: A Retrospective Cohort Study</b> <a href="#">Mari Nakao</a> [Japan], Shinichi Izumi, Yuki Yokoshima, Yoshiko Matsuba, Yutaka Maeno
<b>O21-8</b> 17:40	<b>Do Family Members' Hospital Visits Influence Clinical Outcome of the Patients Admitted to a Convalescent Rehabilitation Ward?</b> <a href="#">Wataru Kakuda</a> [Japan], Sawako Kagamizono, Ayaka Iwato, Kazumi Cho, Mitsuhiro Sano, Takeki Ishida, Ayaka Takahashi
<b>O21-9</b> 17:50	<b>Do Outpatient Rehabilitation Services Save Inpatient Bed Days? Mapping the Relationship between Outpatient Services and Inpatient Rehabilitation Length of Stay in NSW/ACT Hospitals</b> <a href="#">Steven Faux</a> [Australia], Angela Vrasistas-Curto, Christine Shiner, Ian Harris, Michael Pollak, Francis Simmons, Linda Klien

16:30–18:00

Room 10

**Special Session 25: Current Status of Telerehabilitation**Chairs: [Kazuko Shem](#) [United States][Sonoko Nozaki](#) [Japan]

<b>SS25-1</b> 16:30	<b>Telemedicine in Spain Cord Injury in the United States: Implementation, Outcomes and Future</b> <a href="#">Kazuko Shem</a> [United States]
<b>SS25-2</b> 16:50	<b>Digital Biofeedback System versus Conventional Home-based In-person Rehabilitation for Total Hip Arthroplasty: a Feasibility Study</b> <a href="#">Fernando D Correia</a> [Portugal], Andre Nogueira, Ivo Magalhaes, Joana Guimaraes, Maria Moreira, Isabel Barradas, Maria Molinos, Laetitia Teixeira, Joaquim Pires, Rosmaninho Seabra, Jorge Lains, Virgilio Bento
<b>SS25-3</b> 17:00	<b>Medium-term Outcomes a Feasibility Study Comparing Digital versus Conventional Home-based Rehabilitation after Total Hip Replacement</b> <a href="#">Fernando D Correia</a> [Portugal], Andre Nogueira, Ivo Magalhaes, Joana Guimaraes, Maria Moreira, Isabel Barradas, Laetitia Teixeira, Maria Molinos, Joaquim Pires, Rosmaninho Seabra, Jorge Lains, Virgilio Bento

<b>SS25-4</b> 17:10	<b>Medium-term Outcomes after Total Knee Replacement: Follow Up Results of a Feasibility Study Comparing Digital versus Conventional Home-based Rehabilitation</b> <a href="#">Fernando D Correia</a> [Portugal], Andre Nogueira, Ivo Magalhaes, Joana Guimaraes, Maria Moreira, Isabel Barradas, Maria Molinos, Laetitia Teixeira, Jose Tulha, Rosmaninho Seabra, Jorge Lains, Virgilio Bento
<b>SS25-5</b> 17:20	<b>Artificial Intelligence and Telerehabilitation of Patients with Injuries of the Lower Extremities</b> <a href="#">Andriy J Hospodarsky</a> [Ukraine], Andriy I Tsvyakh, Roman S Drevnitsky, Roman O Lutsyshyn
<b>SS25-6</b> 17:30	<b>Rehabilitation of Patients with Injuries of the Elbow Joint of the Upper Extremities by Telemedicine and Artificial Intelligence Technology</b> <a href="#">Andriy I Tsvyakh</a> [Ukraine], Andriy J Hospodarsky, Roman S Drevnitsky, Roman O Lutsyshyn
<b>SS25-7</b> 17:40	<b>Telerehabilitation for Patients with Dysphagia and Dysarthria: Usefulness and Satisfaction</b> <a href="#">Sonoko Nozaki</a> [Japan], Maiko Nishiguchi, Kyoko Okuno, Takako Tanimura, Mika Takeichi, Kentarou Akagi, Yoko Nakano, Mitsuru Furuta, Shiro Yorifuji
<b>SS25-8</b> 17:50	<b>Continued Home Rehabilitation with the Personal Video-physiotherapist</b> <a href="#">Polina V. Tkachenko</a> [Russia], Oleg E. Karpov, Vadim D. Daminov

16:30–18:00

**Room 11**

**Special Session 26: Phenol Neurolysis for Spasticity Management: an Update**

Chair: **Gerard E Francisco** [United States]

<b>SS26-1</b> 16:30	<b>A Retrospective Review on Phenol Neurolysis for Spasticity Management in the Distal Upper Extremity</b> <a href="#">Sheng Li</a> [United States], Kay Jarri, Bei Zhang
<b>SS26-2</b> 17:15	<b>Phenol Neurolysis for Spasticity Management: An Update</b> <a href="#">Rochelle Dy</a> [United States]

# Scientific Program

Day 4 — Thursday, June 13, 2019

08:40–09:10

Room 2

## ISPRM/JARM Special Lecture 14: Practical Steps When Using the International Classification of Functioning, Disability and Health (ICF) in Clinical Routine and Clinical Quality Management

Chair: Masahiko Mukaino [Japan]

- SL14-1** Practical Steps When Using the International Classification of Functioning, Disability and Health (ICF) in Clinical Routine and Clinical Quality Management  
Gerold Hans Stucki [Switzerland]

08:40–09:10

Room 3

## ISPRM/JARM Special Lecture 18: Thermal Infrared Imaging as a Support Tool for Clinical Diagnosis and Follow Up in PM&R

Chair: Hitoshi Kagaya [Japan]

- SL18-1** Thermal Infrared Imaging as a Support Tool for Clinical Diagnosis and Follow Up in PM&R  
Linamara R. Battistella [Brazil]

08:40–09:40

Room 4

## ISPRM/JARM English Session 4

Chair: Sayaka Fujiwara [Japan]

- 1-4-1-1** Outcomes Following Pyrocarbon Proximal Interphalangeal (PIPJ) Arthroplasty  
Thayanthee Nadasan [South Africa], Nureesah Hendricks, Nomzamo C.T Chemane, Olapado Olagbegi
- 1-4-1-2** Rehabilitation of the Salvage Arthrodesis with Bone Auto- and Allografts for Failed Total Ankle Arthroplasties in the Patient with Rheumatoid Arthritis  
Yuya Takakubo [Japan], Aya Narita, Mitsuo Takano, Yuta Suzuki, Kan Sasaki, Juji Ito, Hiromori Sagae, Yumiko Kanauchi, Shinji Kobayashi, Michiaki Takagi
- 1-4-1-3** The Association of Parity with Greater Dynamic Pronation of the Feet  
Neil A Segal [United States], Marc J Heronemus, Kaitlin G Rabe, Irina Tolstykh, K. Douglas Gross, Bart L Wise, Stacy R Chu, Cora E Lewis, Howard J Hillstrom, Michael C Nevitt
- 1-4-1-4** Clinical Study of Cardiopulmonary Function Assessment of Gynecological Cancer-Related Lower Limb Lymphedema  
Quan Xu [China], Yu Pan

**1-4-1-5** Sex Ratio in the Offspring and Exposure to Radiation of Female Healthcare Providers  
Runa Minami, Naoki Nishijima, Kazuma Sawabe, Hisashi Yamazaki, Masato Araki

**1-4-1-6** Sarcopenia is Associated with Worse Recovery of Physical Function and Dysphagia, and A Lower Rate of Home Discharge in Convalescent Rehabilitation  
Yoshihiro Yoshimura, Yoshiko Nishi, Shinya Nishizaka, Satoko Saito, Chika Tanaka, Korin Kuwahara, Makio Yamaga, Hiroaki Koga, Hidetaka Wakabayashi

08:40–10:10

**Room 6**

**Joint Session 6: Joint Session JARM: Special Interest Session on Women and Children by Women Rehabilitation Physicians**

Chairs: Sam S.H. Wu [United States]  
Toyoko Asami [Japan]

**JS6-1** Women and Children Improved Care by Women Rehabilitation Physicians: Insights from the Clinical Research Arena  
Marta Imamura [Brazil]

**JS6-2** Woman Leadership in Community Development for Women and Children with Disabilities: A Malaysian Rehabilitation Perspective  
Zaliha B Omar [Malaysia]

**JS6-3** Rehabilitation Approach for Women and Children with Disabilities from the Perspective of Female Psychiatrists  
Toyoko Asami [Japan]

**JS6-4** Woman Leadership in the Tertiary Care for Women and Children with Complex Rehabilitation Needs  
Margarida Harumi Miyazaki [Brazil]

08:40–09:40

**Room 7**

**Short Workshop 36: The Disaster Rehabilitation Committee: Building Capacity and Evidence for Rehabilitation in Disaster Settings**

Chairs: Fary Khan [Australia]  
Bhasker Amatya [Australia]

**SW36-1** Disaster Rehabilitation - A Critical Role and Need  
Bhasker Amatya [Australia]

**SW36-2** Update in Disaster Management: Pakistan Perspective  
Nabila Najam Soomro [Pakistan]

**SW36-3** Preparedness among Medical Rehabilitation Professionals for Deployment to Future Disaster Settings – An Australian Perspective  
Su Yi Lee [Australia], Bhasker Amatya, Mary P Galea, Fary Khan

**SW36-4** Post-Traumatic Stress Disorder, Functioning, and Environmental Barriers in Wenchuan Earthquake Survivors with Musculoskeletal and Neurological Impairments Eight Years after the Disaster: A Cross-Sectional Modelling Study  
Jan D. Reinhardt [China]

08:40–09:40

Room 8

### Short Workshop 38: Prevention of Injury, Rehabilitation and Return to Play in Anterior Cruciate Ligament Tears

Chair: William F Micheo [Puerto Rico]

**SW38-1** Prevention of Anterior Cruciate Ligament Injury  
William F Micheo [Puerto Rico]

**SW38-2** Rehabilitation of Anterior Cruciate Ligament Injury  
William F Micheo [Puerto Rico]

**SW38-3** Return to Sport Decision after an ACL Injury  
Gerardo E Miranda-Comas [United States]

08:40–09:40

Room 9

### Freepapers 23: Statistics and Epidemiology

Chairs: Stefano Negrini [Italy]

Jie Jia [China]

**O23-1** Statistical Analyses for Repetitive Measures in Longitudinal or Randomized Controlled Trials, a Need in Rehabilitation Medicine  
08:40  
Mario A. Giraldo-Prieto [Colombia]

**O23-2** The Concept and Epidemiology of Disability  
08:50  
Bryan O'Young [United States], James Gosney, Chulhyun Ahn

**O23-3** Keeping Up-to-date with Clinical Research: an Evaluation of PEDro's "Evidence in Your Inbox"  
09:00  
Anne M Moseley [Australia], Steven J Kamper

**O23-4** Struggle for Evidence in Physical and Rehabilitation Medicine: Publication Rate of Randomized Controlled Trials and Systematic Reviews is Growing More Than in Other Therapeutic Fields  
09:10  
Stefano Negrini [Italy], William Levack, Francesca Gimigliano, Chiara Arienti, Jorge Hugo Villafaña, Carlotte Kiekens

**O23-5** The Material and Methods Section of RCTs Do Not Provide Sufficient Information to Allow Clinical Replicability of Complex Interventions: a Cochrane Rehabilitation Methodological Paper  
09:20  
Stefano Negrini [Italy], Chiara Arienti, Joel Pollet, Julia Patrick Engkasan, Gerard E. Francisco, Walter R Frontera, Silvia Galeri, Kamila Gworys, Jolanta Kujawa, Mazlina Mazlan, Farooq A Rathore, Fabienne Schillebeeckx, Carlotte Kiekens

**O23-6** Introduction to the Chinese National Key R&D Program Project – "The Research for the Whole Period Rehabilitation and Information Management System for the Elderly"  
09:30  
[Jie Jia](#) [China], Qing Yang, Zhijie He, Li Ding

09:10–09:40

**Room 2**

**ISPRM/JARM Special Lecture 15: 21st Century Brain Health: TBI, Neurodegeneration and Wellness**

Chair: **Tetsuya Tsuji** [Japan]

**SL15-1** 21st Century Brain Health: TBI, Neurodegeneration and Wellness  
[David X Cifu](#) [United States]

09:10–09:40

**Room 3**

**ISPRM/JARM Special Lecture 19: Applying Recent Technologies for Rehabilitation**

Chair: **Ryuichi Saura** [Japan]

**SL19-1** Applying Recent Technologies for Rehabilitation  
[Nam-Jong Paik](#) [South Korea]

09:40–10:10

**Room 2**

**ISPRM/JARM Special Lecture 16: Oral Hygiene Care Program during Inpatient Stroke Rehabilitation**

Chair: **Masahiro Abo** [Japan]

**SL16-1** Oral Hygiene Care Program During Inpatient Stroke Rehabilitation  
[Leonard S W Li](#) [China]

09:40–10:10

**Room 3**

**ISPRM/JARM Special Lecture 20: Neurogenic Bowel Dysfunction after Spinal Cord Injury and ICF**

Chair: **Akio Tsubahara** [Japan]

**SL20-1** Neurogenic Bowel Dysfunction after Spinal Cord Injury and ICF  
[Jorge Lains](#) [Portugal], Jennifer Pires

09:40–10:40

Room 4

**ISPRM/JARM English Session 5**Chair: **Junko Fujitani** [Japan]

<b>1-4-2-1</b>	<b>Pitfalls at the Time of the Recovery Rehabilitation of Acute Aortic Dissection</b> <a href="#">Shuichi Kozawa</a> [Japan], Anli Date, Yosimichi Kobayasi, Kosuke Miyamoto, Takayuki Hasegawa, Sigekazu Fujita, Masaru Kobayasi, Yositada Sakai
<b>1-4-2-2</b>	<b>Characterization of the Relationship Between Peripheral Blood Monocyte Subsets and Their Chemokines in the Early Stages of Acute Coronary Syndrome and Cardiac Rehabilitation</b> <a href="#">Miaomiao Xu</a> [China], Jie Jia
<b>1-4-2-3</b>	<b>The Research Progress of HIIT in Type 2 Diabetes</b> <a href="#">Qiu Nie</a> [China], Jian Chen
<b>1-4-2-4</b>	<b>A study of Setting Goals of Cancer Rehabilitation and Outcome of Home Discharge for the Patients Receiving Best Supportive Care</b> <a href="#">Tsutomu Okada</a> [Japan], Keiko Furukawa, Amu Kawaguchi, Yasushi Miura
<b>1-4-2-5</b>	<b>In The Community Service Center Sets Up A Senior Gym to Provide Adapted Exercise Program for Elderly Aging in Place and Rehabilitation</b> <a href="#">Wan-Ling Lu</a> [Taiwan]
<b>1-4-2-6</b>	<b>Building A Caregiver Support Network By Home-Based Rehabilitation Integrated Respite Care Service in the Community: Toward Zero "Leaving Jobs for Nursing Care"</b> <a href="#">Wan-Ling Lu</a> [Taiwan]
<b>1-4-2-7</b>	<b>Testing for Morphological-Clinical Correlation Using Statistical Non-Parametric Mapping</b> <a href="#">Todd Pataky</a> [Japan], Masahide Yagi, Philip Cox, Hanaa Naouma, Noriaki Ichihashi

09:40–10:40

Room 7

**Short Workshop 37: An Update on Chronic Pain Syndromes**Chairs: **Aysegul Ketenci** [Turkey]**Dilsad Sindel** [Turkey]

<b>SW37-1</b>	<b>An Update on Chronic Pain Syndromes - Chronic Pain Pathophysiology</b> <a href="#">Ozge Kenis-Coskun</a> [Turkey]
<b>SW37-2</b>	<b>Common Chronic Pain Syndromes: What is New?</b> <a href="#">Aydan Oral</a> [Turkey]
<b>SW37-3</b>	<b>Treatment of Fibromyalgia: Where are We Now?</b> <a href="#">Deniz Evcik</a> [Turkey]
<b>SW37-4</b>	<b>Unusual Chronic Pain Syndromes: What Can We Encounter?</b> <a href="#">Gulseren Akyuz</a> [Turkey]



09:40–10:40

Room 8

### Short Workshop 39: Rehabilitation and Dogs: the Prospects of Service Dogs and Animal Assisted Therapy (AAT)

Chairs: Tomoko Takayanagi [Japan]

Naohisa Kikuchi [Japan]

<b>SW39-1</b>	<b>Rehabilitation and Dogs - The Prospects of Service Dogs and Animal-Assisted Therapy (AAT) -</b> Tomoko Takayanagi [Japan]
<b>SW39-2</b>	<b>Consultation with the Mobility Service Dog's Introduction for the Disabled Persons and Practical Management to Officially Approval</b> Naohisa Kikuchi [Japan]
<b>SW39-3</b>	<b>The Multifaceted Effects of Mobile-Service-Dogs: A Qualitative Analysis of Using a Mobile-Service-Dog on the Health Condition of a Person with Complete C5 Spinal Cord Injury</b> Yasunori Ikenaga [Japan], Ikuko Sakai, Yui Sakurai, Tomoko Takayanagi
<b>SW39-4</b>	<b>First Trial of Animal Assisted Therapy Using a Dog in a University Hospital in Japan</b> Hiroaki Kitagawa [Japan]

09:40–10:40

Room 9

### Freepapers 24: ICF

Chairs: Carlote Kiekens [Belgium]

Masahiko Mukaino [Japan]

<b>O24-1</b> 09:40	<b>Exploratory ICF-based Co-operations in Rehabilitation Department: A Case from China</b> Feng Lin [China], Zhong-Li Jiang
<b>O24-2</b> 09:50	<b>Use of ICF and Software ICF-reader in Multidisciplinary Rehabilitation of Acute Stroke Patients</b> Aleksi Andreevich Shmonin [Russia], Maria Nikolaevna Maltseva, Maria Sergeevna Prosvirina, Elena Vladimirovna Verbitskaya, Elena Valentinovna Melnikova
<b>O24-3</b> 10:00	<b>Back Pain Rehabilitation Related Changes in Automatically Predicted ICF Activity and Participation Categories</b> Thomas Kienbacher [Austria], Elisabeth Fehrmann, Kerstin Tuechler, Patrick Mair, Gerold Ebenbichler
<b>O24-4</b> 10:10	<b>Functioning and Disability Profile of People with Various Disabilities Based on the Framework of the ICF - a Nationwide Databank Study</b> Chao Pen Chen [Taiwan], Tsan Hon Liou, Shih Wei Hwang
<b>O24-5</b> 10:20	<b>Examination of Inter-rater Reliability between Patients and Health Professionals in the Evaluation of Body Function Categories of ICF Rehabilitation Set</b> Yuki Senju [Japan], Masahiko Mukaino, Megumi Ozeki, Yuki Okochi, Koji Mizutani, Makoto Watanabe, Eiichi Saitoh, Shigeru Sonoda

**O24-6** 10:30 **A Preliminary Survey with the International Classification of Functioning, Disability and Health (ICF) Rehabilitation Set in Patients Admitted to Convalescent Rehabilitation Wards**  
[Reisuke Funahashi](#) [Japan], Masahiko Mukaino, Yohei Otaka, Yuki Senju, Yuki Okochi, Kouji Mizutani, Eiichi Saitoh

10:10–10:40

**Room 2**

**ISPRM/JARM Special Lecture 17: Rehabilitation Services in Disaster Response: Role and Future Agenda**

Chair: **Yohei Otaka** [Japan]

**SL17-1** **Rehabilitation Services in Disaster Response: Role and Future Agenda**  
[Fary Khan](#) [Australia]

10:10–10:40

**Room 3**

**ISPRM/JARM Special Lecture 21: Dynamic Diffusion Tensor Imaging of Spinal Cord and Brain in Spinal Cord Injury — A Series of Animal and Human Studies**

Chair: **Fumihito Tajima** [Japan]

**SL21-1** **Dynamic Diffusion Tensor Imaging of Spinal Cord and Brain in Spinal Cord Injury—A Series of Animal and Human Studies**  
[Jianjun Li](#) [China]

10:45–11:15

**Room 2**

**Keynote Lecture 9: ISPRM and the Future of PRM**

Chair: **Jorge Lains** [Portugal]

**KL9-1** **ISPRM and the Future of PRM**  
[Walter R Frontera](#) [United States]

11:15–12:00

**Room 2**

**Sidney Licht Lecture: Spasticity and Neuro-orthopedics, the Beating Heart of PRM**

**SLL-1** **Spasticity and Neuro-orthopedics, the Beating Heart of PRM**  
[Isabelle Laffont](#) [France]

12:00–12:40

**Room 2**

**Closing Ceremony**

---

14:00–15:00

ISPRM2019 Post Congress

Room 6

**ISPRM/JARM Special Lecture 22: Physical Therapy Modalities and Rehabilitation Techniques in the Management of Neuropathic Pain**

Chair: **Meigen Liu** [*Japan*]

**SL22-1** Physical Therapy Modalities and Rehabilitation Techniques in the Management of Neuropathic Pain

[Gulseren Akyuz](#) [*Turkey*]

---

15:10–16:10

ISPRM2019 Post Congress

Room 6

**ISPRM/JARM Special Lecture 23: Spatial Mechanisms of Pain: Emerging Targets for Rehabilitation Therapy**

Chair: **Tetsuo Koyama** [*Japan*]

**SL23-1** Spatial Mechanisms of Pain: Emerging Targets for Rehabilitation Therapy

[Robert C Coghill](#) [*United States*]