

48th ISCoS ANNUAL SCIENTIFIC MEETING

21-24 October 2009

Congress Center
Piazza Adua,1 - Firenze (Italy)

UNDER THE HIGH PATRONAGE OF
The President of the Italian Republic

PATRONAGES
University of Florence
Tuscany Region
Province of Florence
Municipality of Florence

IN COLLABORATION WITH
Società Medica Italiana Paraplegia (SoMIPar)

Azienda Ospedaliero-Universitaria Careggi
Agenzia Regionale per la cura dei Medullolesi
Unità Spinale Firenze
Neuro-Urologia Firenze

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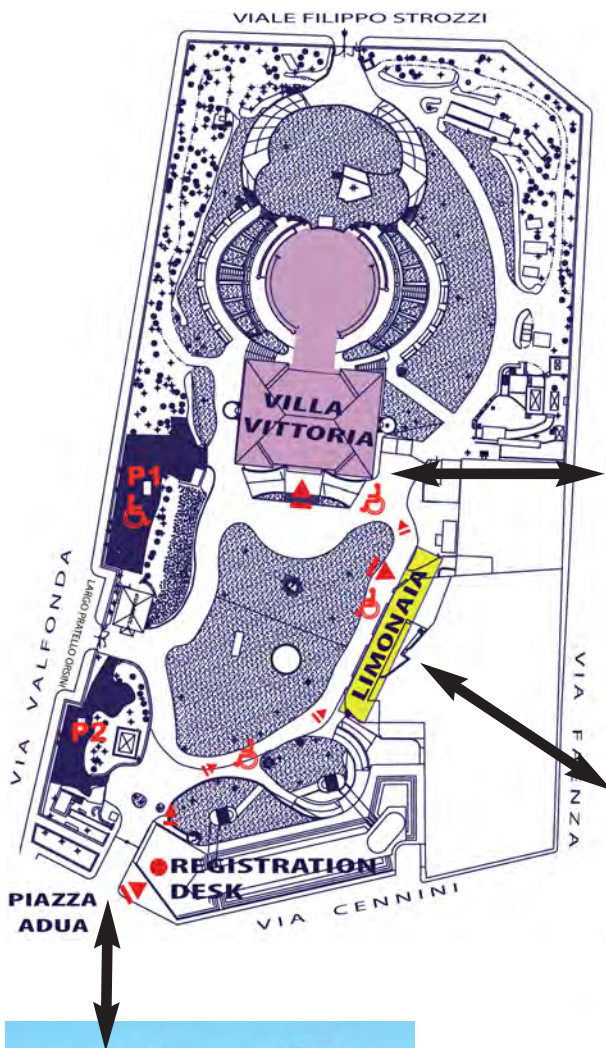
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- 1- VILLA VITTORIA PIANO TERRA - GROUND FLOOR
- 2- VILLA VITTORIA PIANO PRIMO - FIRST FLOOR
- 3- VILLA VITTORIA PIANO SECONDO - SECOND FLOOR
- 4- VILLA VITTORIA BELVEDERE
- 5- ANFITEATRO - AMPHITHEATRE
- 6- AUDITORIUM
- 7- PASSI PERDUTI
- 8- LIMONAIA



+2 SALA VERDE
LIFT A/B

+1 NO EVENTS

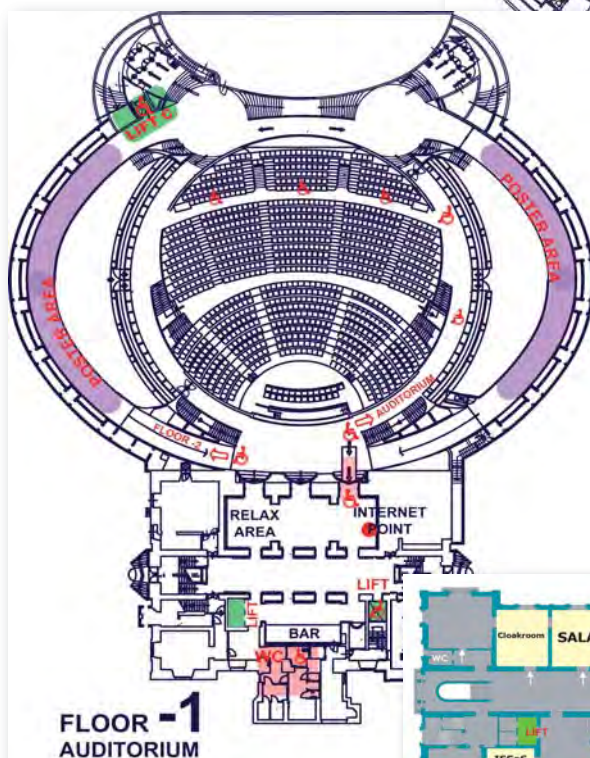
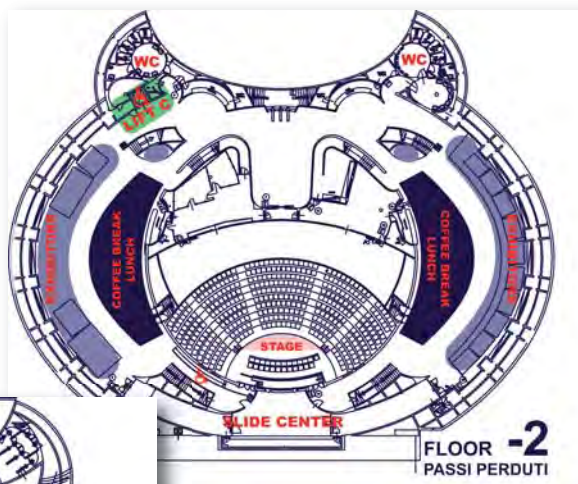
0 SALA ONICE
ISCOS DESK
CLOAKROOM
LIFT A/B

-1 AUDITORIUM
POSTER AREA
RELAX AREA
INTERNET POINT
WC
LIFT A/B

 ONLY WHEELCHAIR USERS
TO GO -2 LEVEL
LIFT C

-2 AUDITORIUM STAGE
SLIDE CENTER
COFFEE & LUNCH AREA
EXHIBITION AREA

 ONLY WHEELCHAIR USERS
TO GO -1 LEVEL
LIFT C



	WEDNESDAY 21/10/09			THURSDAY 22/10/09			
07:00	Registration			Registration			
	Limonaia	Sala Verde 2° Floor	Sala Onice Ground Floor	Auditorium	Sala Verde 2° Floor	Sala Onice Ground Floor	
08:00	Functional Outcome Measures Susie Charlifue	Autonomic evaluations: up to date Andrei Krassioukov	Management of SCI in Children Lawrence Vogel	Presentation Authorities			
08:30				Presidential Lecture Wagih El-Masry			
09:00				ISRT Lecture Peter Ellaway			
09:30							
10:00		Coffee break			Coffee break		
10:30	Functional Outcome Measures Susie Charlifue	Spasticity: Measurement and Management Anand Nene	Management of SCI in Children Lawrence Vogel	Hollister Symposium	IPSCI-ISCoS P.M. von Groote	Using the ICF in clinical practice and research Inge Eriks-Hoogland	
11:00				Bladder Management and Sexuality	Symposium Neuropathic Pain Following SCI		
11:30							
12:00				Free Papers Session 1	Free Papers Session 2		
12:30							
13:00		Lunch			Lunch		
13:30							
14:00	Neurogenic detrusor overactivity in SCI: a journey from the bladder wall to the brain SIUD	Multiprofessional Working Team	Management of SCI in Childre Lawrence Vogel	Opening Lecture Amiram Catz	Free Papers Session 3	Free Papers Session 5	
14:30		CNOPUS		Predicting Outcomes			
15:00		Management of secondary complications Andrei Krassioukov					
15:30							
16:00				Coloplast Symposium	Free Papers Session 4	Free Papers Session 6	
16:30				Neurogenic Bladder, Bowel Management and Quality of Life			
17:00				SoMIPar Annual Meeting			
17:30	OPENING CEREMONY Piazza della Signoria (Palazzo Vecchio, Salone dei 500) LUDWIG GUTTMANN LECTURE Outcome Measures: Evolution in Clinical Trials John F. Ditunno WELCOME COCKTAIL						
18:00							
18:30							
19:00							
19:30							
20:00							

MEETING	WORKSHOP	SYMPOSIUM
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FRIDAY 23/10/09			SATURDAY 24/10/09		
Registration			Registration		07:00
Auditorium	Sala Verde 2° Floor	Sala Onice Ground Floor	Auditorium	Sala Verde 2° Floor	
	Free Papers Session 7	Free Papers Session 9	Prevention Symposium in collaboration with WING FOR LIFE	Opening Lecture Manfred Stöhrer	08:00
Symposium Update on Experimental Pharmacological, Cell Transplant, Rehabilitation Interventions for the Treatment of SCI				Urinary Incontinence	08:30
					09:00
					09:30
	Coffee break			Coffee break	10:00
	Free Papers Session 8	Symposium Imaging the Complications Standards for Neurological Classification of SCI 2009 William P.Waring	Prevention Symposium in collaboration with WING FOR LIFE Closing ceremony Presentation 2010	Symposium KCI Pressure Ulcers	10:30
Astra Tech Symposium Philosophical counselling and Neurogenic Bladder Management				New Treatments for Pressure Ulcers	11:00
					11:30
					12:00
					12:30
					13:00
	Lunch				13:30
					14:00
Opening Lecture Anand Nene	Opening Lecture Lawrence Vogel	Intervention of Psychologists in Spinal Unit: Coping Effectiveness Training Paul Kennedy			14:30
Spasticity Management	Spinal Cord Lesions in Children				15:00
					15:30
					16:00
	Coffee break				16:30
SoMIPar Guidelines					17:00
ISCOS Annual General Meeting					17:30
					18:00
					18:30
					19:00
					19:30
GALA DINNER Fortezza da Basso- Arsenale					20:00

ORAL COMMUNICATIONS	LECTURE	CEREMONY & EVENTS
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Bladder and bowel management

Let's have fun while we show you our new, exciting products for bladder and bowel management

Stop by the Coloplast booth to learn more about;

- **SpeediCath Control** – the new male catheter engineered for increased control
- **SpeediBag Compact** – the new discreet urine bag for women using SpeediCath Compact catheter
- **Peristeen Anal Irrigation** – the unique bowel management system for children and adults

Join our symposium

“Neurogenic Bladder and Bowel Management and Quality of Life” Thursday 22 October, 16:30 – 18:30, Palazzo dei Congressi

Ostomy Care
Urology & Continence Care
Wound & Skin Care

Coloplast develops products and services that make life easier for people with very personal and private medical conditions. Working closely with the people who use our products, we create solutions that are sensitive to their special needs. We call this intimate healthcare. Our business includes ostomy care, urology and continence care and wound and skin care. We operate globally and employ more than 7,000 people.

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Coloplast A/S
Holtedam 1
3050 Humlebæk
Tel: +45 49111111

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International Spinal Cord Society

ISCoS
2009

21-24 October

Florence

48th Annual Scientific Meeting

PROGRAMME

COMMITTEE & COUNCIL MEETING

TUESDAY
20 OCTOBER

COMMITTEE MEETINGS

07.00-18.00	Registration
08.00-10.30	Executive Committee
10.30-11.00	Nominations Committee
11.00-13.00	Scientific Committee
13.00-14.00	Lunch
14.00-15.00	Prevention Committee
15.00-16.30	Editoria lBoard
16.30-18.00	Education Committee

LIMONAIA

WEDNESDAY
21 OCTOBER

COUNCIL MEETING

13.00-14.00	Council Lunch
14.00-17.00	Council Meeting

PALAFFARI Floor 4

07.00 Registration

08.00-13.00	WORKSHOP New Developments in Functional Outcome Measures for People With SCI <i>Chair: Susan Charlifue</i>
08.00-08.15	General Overview W0 Introduction of the workshop faculty and a general overview of the ASIA/ISCoS/NIDRR <i>Susan Charlifue</i>
08.15-10.00	Medical outcomes in daily clinical practice: review, recommendations and update from new research W1 Use of the International Standards for the Neurological Classification of SCI <i>Ralph Marino, Mary Jane Mulcahey, Armin Curt, Amie Jackson</i>
10.00-10.30	Coffee Break
10.30-13.00	Functional Outcomes in daily clinical practice: review, recommendations and update from new research W2 Update on the Functional Independence Measure (FIM), the Quadriplegia Index of Function (QIF), and the Spinal Cord Independence Measure (SCIM III) <i>Gordana Savic, Amiram Catz</i> W3 The 5AML (Five Additional Mobility And Locomotor Items) <i>Lisa Harvey</i> W4 The VFM (Valutazione Funzionale Mielolesi) <i>Mariangela Taricco</i> W5 Update of walking capacity measures, the ten meter walking test (10MWT), Walking Index for Spinal Cord Injury (WISCI II) and the six minute walk test <i>Gordana Savic, John F. Ditunno, Giorgio Scivoletto, Marco Molinari</i>

- W6 Recommendations from the Functional Recovery Measures Work Group and updates from new research on functional outcome measures

Kim Anderson

Wrap-up, open discussion with audience

Amie Jackson, Eric Weerts, Ralph Marino

13.00-14.00

Lunch

14.00-17.30

WORKSHOP S.I.U.D.

Understanding neurogenic detrusor overactivity in S.C.I.: a journey from the bladder wall to the brain

Chair: Sandro Sandri - Enrico Finazzi Agrò

- W7 Pathophysiology of NDO: what happens in the central nervous system?

Antonella Giannantoni

- W8 Pathophysiology of NDO: what happens in the bladder wall?

William C. de Groat

- W9 Antimuscarinics and NDO

Enrico Finazzi Agrò

- W10 Vanilloids and NDO

Massimo Lazzeri

DISCUSSION

- W11 Botulinum Toxin A in Spinal Cord Injury Patients

Giulio Del Popolo

- W12 Neuromodulation in Neurogenic Detrusor Overactivity

Michele Spinelli

- W13 Surgery for NDO

Antonio Carbone

DISCUSSION

Take Home Messages

Francesco Pesce

08.00-10.00

WORKSHOP

Autonomic evaluations of patients with SCI: up to date

Chair: Andrei Krassioukov

- W14 Developing international standards for the assessment of autonomic dysfunctions following spinal cord injury.
Andrei Krassioukov
- W15 Documentation of Sexual Capabilities after SCI
Marcalee Alexander Sipski
- W16 Autonomic Standards for SCI Patients: Bladder Dysfunction: Up to Date
Michael Kennelly
- W17 Autonomic Data Sets
Fin Biering-Sørensen
- W18 Bowel dysfunctions
Klaus Krogh

10.00-10.30

Coffee Break

10.30-13.00

WORKSHOP

Spasticity: measurement and management

Chair: Anand Nene

Introduction
Anand Nene

- W19 Pathophysiology of Spastic Paresis - Rationale For Focal Interventions
Jean-Michel Gracies
- W20 Assessment of spasticity - A Review
Gerlienke Voerman
- W21 New Measurement Approaches
Judith Fleuren
- W22 Treatment algorithm for spasticity in adults
Govert Snoek
- W23 Spinal Spasticity; Patients Perspective
Bakul M. Soni

Conclusions and closure of workshop
Anand Nene

13.00-14.00 **Lunch**

14.00-15.30 **WORKSHOP**
The workings of the multi-professional team in SCI unit
Chair: Laura Valsecchi

W24 Introduction to Multi-professional Team in Spinal Unit and review of basilar rules for Working in Team
Laura Valsecchi

W25 The role of the Nurse serving on the Team. Organizational models for better quality assistance (Primary nursing, Case manager, Goal planning)
Paola Pignotti

W26 Schedule for Working in Multi-professional Team
Lucia Bambagioni

W27 The role of social-worker and psychologist in Spinal Unit
Gabriella Rossi

W28 Network among health-care and social practitioners working in Spinal Unit
Alberto Nobile

W29 Main objectives of Occupational Therapist in Multi-professional Team in Spinal Unit
Maru Marquez

15.30 – 17.30 **WORKSHOP**
Evidence based management of secondary complications after SCI: what, when, and how?
Chair: Andrei Krassioukov

W30 What do we know, and what don't we know, about blood pressure management in patients with spinal cord injury?
Andrei Krassioukov

W31 Evidence based management of spasticity secondary to spinal cord injury
Andrea F. Townson

W32 Sexual Health SCIRE Case Study
Stacy Elliott

08.00-17.00

WORKSHOP

Management Of SCI in Children

Chair: Lawrence Vogel

W33 Introduction/overview of pediatric SCI including medical complications/bowel
Lawrence Vogel

W34 Urological management of SCI in children and adolescents
Mario De Gennaro

W35 Epidemiology of pediatric SCI
Michael J. DeVivo

10.00-10.30

Coffee Break

W36 Pediatric Spinal Cord Injury in Europe
Marika Augutis

W37 Orthopaedic considerations in pediatric SCI (acute management of spine fractures, hips and spine disorders, HO, pathological fractures)
Randal R Betz

W38 Use of the International Standards for Neurological Classification of Spinal Cord Injury in Pediatrics
Mary Jane Mulcahey

W39 Rehabilitation of the child with a SCI (general principles, ambulation, mobility, SCI education)
Allison Graham

13.00-14.00

Lunch

W40 Innovative rehabilitative strategies (activity based rehab, body weight supported ambulation, and FES cycling, ambulation and UE function)
Randal R Betz

W41 Evaluation and Management of the Hand in Children with Tetraplegia
Mary Jane Mulcahey

W42 Discharge planning of pediatric ventilator dependent Spinal Cord Injury patients
Tiziana Redaelli

W43 Psychosocial/sexuality/transition and innovative recreation and leisure time programming for the child and adolescent with a SCI
Marika Augutis, Lawrence Vogel

07.00	Registration
08.00-08.30	PRESENTATION 48th Annual Scientific Meeting
08.30-09.15	PRESIDENTIAL LECTURE L2 Past, present and Future of ISCoS <i>"da piccola ghianda a grande quercia"</i> <i>Wagih El Masry</i>
09.15-10.00	ISRT LECTURE L3 Physiological tools for monitoring outcome of interventive measures in spinal cord injury: a Clinical Initiative <i>Peter Ellaway</i>
10.00-10.30	Coffee Break
10.30-11.45	SYMPOSIUM Syponsored by Hollister Bladder Management and Sexuality in Spinal Cord Injury <i>Chair: Manfred Stöhrer</i>
20 min	S1 The development and assessment of a vaprophilic catheter <i>Pierre Denys</i>
20 min	S2 Intermittent catheterization and urinary tract infection <i>David Castro-Diaz</i>
20 min	S3 Sexuality and Incontinence: Uncharted Urogenital Systems <i>Marcalee Alexander Sipski</i>
	Discussion
11.45-13.00	FREE PAPERS Session 1 <i>Chair: Gordana Savic - Giorgio Scivoletto</i>
15min	O1 Assessing orgasm in men with spinal cord injury <i>Frédérique Courtois</i>
15 min	O2 Hollywood to Hospital <i>Allison Graham</i>
15 min	O3 SCIRehab: Documenting the Amount and Type of Interventions in Spinal Cord Injury Rehabilitation and their Variation among Patients <i>Gale Whiteneck</i>

- | | | |
|--------|----|---|
| 15 min | O4 | Sensory options for a brief screening SCI examination
<i>William P. Waring</i> |
| 15 min | O5 | Conversion in ASIA impairment scale during the first year after traumatic Spinal Cord Injury
<i>Hubertus van Hedel</i> |

13.00-14.00 Lunch

14.00-16.30 PREDICTING OUTCOMES
Chair: Mariangela Taricco - Amiram Catz

- 14.00-14.30 OPENING LECTURE**
- | | | |
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| | OL1 | Functioning outcome measures, their combination, and the concept of ability realization, for the care and research of spinal cord injuries
<i>Amiram Catz</i> |
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|--------|-----|--|
| 15 min | O6 | One year follow-up of monotraumatic vs. polytraumatic paraplegic patients - Is polytrauma a confounding factor of the functional outcome?
<i>Cornelia Putz</i> |
| 15 min | O7 | Is determination between complete and incomplete traumatic spinal cord injury clinically relevant?
<i>Joost J. van Middendorp</i> |
| 15 min | O8 | Comparable predictive value for walking ability of early tibialis motor evoked potentials and total motor score in incomplete cervical SCI
<i>Martin Schubert</i> |
| 15 min | O9 | Falls in ambulatory patients with spinal cord injury: validity and reliability of the berg-balance scale
<i>Markus Wirz</i> |
| 15 min | O10 | Responsiveness of dermatomal somatosensory evoked potentials (dSSEPs) and electrical perception thresholds (EPTs) in cervical spinal cord injury (SCI)
<i>Kip J. Kramer</i> |
| 15 min | O11 | Appraisals, coping and psychological outcome measures in a European sample
<i>Paul Kennedy</i> |

16.00-16.30 Coffee Break

16.30-18.30

SYMPOSIUM

Sponsored by Coloplast

Neurogenic Bladder and Bowel Management and Quality of Life

Chair: Fin Biering Sørensen

- | | |
|--------|--|
| 15 min | S4 Generic introduction on neurogenic bladder problems and management
<i>Jean-Jacques Wyndaele</i> |
| 15 min | S5 Colorectal Dysfunction In Spinal Cord Injury: Pathophysiological And Clinical Considerations
<i>Gabriele Bazzocchi</i> |
| 20 min | S6 Quality of life instruments for people with disabilities
<i>Susie Charlifue</i> |
| 20 min | S7 Qualiveen: A QoL scale designed for spinal cord injured individuals
<i>Jürgen Pannek</i> |
| 20 min | S8 How bladder and bowel problems can influence the life of a disabled person
<i>Michael Cogswell</i> |
| | Round Table and Discussion |

18.30-19.30

SoMIPar GENERAL MEETING

10.30-11.00 ISCoS-IPSCI PRESENTATION

- L4 *Chair: Wagih El-Masry*
International Perspectives on Spinal Cord Injury (IPSCI)
A collaborative ISCoS-WHO project
Per Maximilian von Groote

11.00-12.00 PAIN SYMPOSIUM Neuropathic pain following SCI: Classification, Mechanism and Treatment *Chair: Nanna Brix Finnerup*

20 min S9 Classification and epidemiology of neuropathic pain following SCI
Nanna Brix Finnerup

20 min S10 Pathophysiological mechanisms of neuropathic pain after SCI
Julian Scott Taylor

20 min S11 Treatment of neuropathic pain following SCI
Cecilia Norrbrink

12.00-12.45 FREE PAPERS Session 2 *Chair: Nanna Brix Finnerup - Cecilia Norrbrink*

15 min O12 Screening tools for assessing and diagnosing neuropathic pain: can they be of use in the diagnostic work-up in individuals with spinal cord injury
Helene Hallstroem

15 min O13 Effects of intrathecal ziconotide and baclofen on pain and spasticity in subjects affected by spinal cord injury
Giulia Stampacchia

15 min O14 Functional surgery for foot deformities in SCI patients
Maria Grazia Benedetti

13.00-14.00 Lunch

14.00-16.00 FREE PAPERS Session 3 *Chair: Amie Jackson - Harvinder S. Chhabra*

15 min O15 What do people with spinal cord injury value most: priorities as a function of self efficacy
James Middleton

15 min O16 Changes in need for assistance in long-standing spinal cord injury
Gordana Savic

15 min O17 Physical Activity Recall Assessment and Metabolic Syndrome symptoms in men with Spinal Cord Injury
Laurent Ballaz

15 min	O18	Training people with chronic spinal cord injuries to sit unsupported: a randomised controlled trial. <i>Claire Boswell-Ruys</i>
15 min	O19	Modular rehabilitation: a client-centred task-oriented training to improve arm-hand-skilled-performance in cervical spinal cord injured persons <i>Annemie If Spooren</i>
15 min	O20	Efficacy of balance rehabilitation in spinal cord lesion patients <i>Valentina Di Donna</i>
15 min	O21	Are passive movements effective for the treatment and prevention of contractures? A randomised controlled trial <i>Lisa Harvey</i>
15 min	O22	Effect of intensive exercise therapy with and without gravity compensation on upper extremity function in subjects with chronic cervical SCI <i>Mirjam Kouwenhoven</i>

16.00-16.30 Coffee Break

16.30-18.30 FREE PAPERS Session 4 Chair: Claes Hultling - William Donovan

15 min	O23	Development of international data sets for activities and participation <i>Marcel Post</i>
15 min	O24	It takes two to tango revisited: the meaning of integration and participation for people with sci in europe - a comparison of Switzerland and Norway <i>Jan D. Reinhardt</i>
15 min	O25	Comparison of the demographic characteristics and outcomes for patients admitted into specialist and non-specialist SCI rehabilitation units <i>Peter New</i>
15 min	O26	Predicting individual patterns of bone loss from baseline bone scans taken in the early stages of spinal cord injury <i>Sylvie Coupaud</i>
15 min	O27	Weight matter: physical and psychosocial health of persons with spinal cord injury in relation to body mass index <i>Yuying Chen</i>
15 min	O28	Severe degeneration of peripheral nerves after SCI: a European multicenter study in 345 patients. <i>Hendrik Van de Meent</i>
15 min	O29	Critical illness polyneuromyopathy in patients with spinal cord injury. <i>Giuseppe De Scisciolo</i>
15 min	O30	Dysphagia in spinal cord injury patients <i>Margarita Vallès</i>

10.30-13.00 WORKSHOP

Using the ICF (International Classification of Functioning, Disability and Health) in clinical practice and research

Chair: Inge Eriks-Hoogland

- 15 min W45 Using the ICF (International Classification of Functioning, Disability and Health) in clinical practice and research
Inge Eriks-Hoogland, Regula Spreyermann, Alexandra Rauch

13.00-14.00 Lunch

14.00-16.00 FREE PAPERS Session 5

Chair: Stella Engel - Mauro Menarini

- 15 min O31 Expectations about work: young adult's experiences of work after spinal cord injury
Lisa Bergmark
- 15 min O32 Level of stress: A study on caregivers of traumatic tetraplegic patients with Spinal Cord Injury in a rehabilitation centre in Bangladesh
Shariful Islam
- 15 min O33 Sexual dysfunction in Cauda Equina Syndrome
Amrithlal A Mascarenhas
- 15 min O34 Sexual-urological dysfunction and psychological distress in female patients with spinal cord lesions (SCL)
Lina Di Lucente
- 15 min O35 The Stockholm Thessaloniki Acute Traumatic Spinal Cord Injury Study (STATSCIS): Conditions and outcomes at one year post-trauma
Anestis Divanoglou
- 15 min O36 Annual follow up after SCI with a new ICF-based tool
Regula Spreyermann
- 15 min O37 Long term follow up (mean 24 years) of post-traumatic lumbar syringomyelia
Niknam Hussain
- 15 min O38 Physical therapy, occupational therapy and sports therapy in 3 Dutch SCI rehabilitation centers.
Sacha van Langeveld

16.00-16.30 Coffee Break

16.30-18.15 FREE PAPERS Session 6
Chair: Shinsuke Katoh - Giorgio Scivoletto

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|--------|-----|--|
| 15 min | O39 | Traumatic and non traumatic spinal cord lesions: comparison of neurological and functional outcomes
<i>Giorgio Scivoletto</i> |
| 15 min | O40 | Motor unit number estimation in cervical or thoracic SCI persons and rats
<i>Hua Guan</i> |
| 15 min | O41 | Experimental spinal cord repair by CNS PNS connection
<i>Giorgio Brunelli</i> |
| 15 min | O42 | New Insights into the Pathophysiology of Cervical Spondylotic Myelopathy from MRI Measurements of Cerebrospinal Fluid Flow and Spinal Cord Motion
<i>Erin MacMillan</i> |
| 15 min | O43 | Minimally invasive expansive laminoplasty
<i>Yasunobu Itoh</i> |
| 15 min | O44 | The influence of the neurological level of injury in bone's mineral content and mechanical properties, lean mass and fat mass in paraplegia
<i>Yannis Dionyssiotis</i> |
| 15 min | O45 | Clinical trial of Myoelectrically controlled FES (MeCFES) for assisting hand function in subjects with tetraplegia –A study of usersatisfaction
<i>Davide Dalla Costa</i> |

07:00 **Registration**

08.30-11.30 **SYMPOSIUM**
Update on experimental pharmacological, cell transplant and rehabilitation interventions for the treatment of spinal cord injury
Chairs: Sergio Aito, John Steeves

30 min S12 General guidelines for the conduct of SCI clinical trials and factors influencing the interpretation of human study data
John Steeves

30 min S13 Clinical trials for spinal cord injuries
Wise Young

30 min S14 Stem cell transplants after SCI: What is the preclinical evidence for benefit and what are the sources of transplant materials?
Alain Privat

10.00-10.30 **Coffee Break**

30 min S15 Active rehabilitation strategies to promote neural plasticity and functional recovery after SCI
Hubertus van Hedel

30 min Panel discussion with audience
Sergio Aito

11.30-13.30 **SYMPOSIUM**
Sponsored by Astra Tech
Philosophical counselling and Neurogenic Bladder Management - What's next?
Chair: Giulio Del Popolo

Introduction
Giulio Del Popolo

20 min S16 History of bladder catheter
Francesco Pesce

20 min S17 How to optimise the outcome of CIC?
Jean-Jacques Wyndaele

20 min S18 Bladder and mind -Even Wittgenstein needed to pee
Claes Hultling

30 min S19 Understanding the neurogenic bladder
William C. de Groat

25 min Plenary Session: Evolution of bladder management

13.30-14.30 **Lunch**

14.30-16.30 **SPASTICITY MANAGEMENT**
Chair: Anand Nene - Giuseppe De Scisciolo

14.30-15.00 **OPENING LECTURE**
 OL2 Spasticity – What's the Catch?
Anand Nene

15 min O46 Inertial sensing in pendulum test of spasticity
Rajmond Šavrin

15 min O47 Chronic Pudendal Nerve Stimulation in incomplete spinal cord injury is able to reduce lower limb spasticity while treating neurogenic detrusor overact
Silvia Malaguti

15 min O48 Reduction of spasticity with repetitive transcranial magnetic stimulation in patients with incomplete spinal cord injury
Hatice Kumru

15 min O49 Intrinsic hand stiffness - underdiagnosed phenomenon in tetraplegia and spasticity
Carina Reinholdt

15 min O50 Improved activity performance after surgical treatment of spasticity in the hand
Johanna Wangdell

15 min O51 Identification of motor point for neuro-block in spasticity management
Jianan Li

16.30-17.00 **Coffee Break**

17.00-17.30 **SoMIPar LECTURE**
 L5 **Italian Multidisciplinary Guidelines for the Acute Management of Spinal Cord Injury**
Jacopo Bonavita

17.30-18.30 **ISCoS ANNUAL GENERAL MEETING**

08.15-10.00 FREE PAPERS Session 7

Chair: Cristina Pagliacci - Fazlul Hoque

- | | |
|--------|---|
| 30 min | O52 Orthostatic hypotension among elite wheelchair athletes
<i>David Mikhail</i> |
| 15 min | O53 A new approach to improve fecal occult blood test (fobt) for colonic cancer screening in patients with sci
<i>Gabriele Bazzocchi</i> |
| 15 min | O54 A prospective examination of the menopause transition in women with sci
<i>Claire Kalpakjian</i> |
| 15 min | O55 Computational 3d modeling of cerebrospinal fluid dynamics for simulation of drug delivery and distribution
<i>Luca A. Finelli</i> |
| 15 min | O56 The effect of radiotherapy on the prophylaxis of heterotopic ossification in patients with spinal cord injury
<i>Julia Maria D'Andréa Greve</i> |
| 15 min | O57 Cortical Plasticity: effects of a BWSTT and FES training in spinal cord injured patients.
<i>Emiliana Bizzarini</i> |
| 15 min | O58 A Decade of Experience with Laparoscopic Intramuscular Diaphragm Pacing at a Single Institution: Replacing Ventilators in Tetraplegics
<i>Raymond Onders</i> |

11.30-13.30 FREE PAPERS Session 8

Chair: Susie Charlifue - Michael Craggs

- | | |
|--------|--|
| 15 min | O59 High frequency spinal cord stimulation (hf-scs): a new method of inspiratory muscle activation in an animal model of spinal cord injury
<i>Anthony F. DiMarco</i> |
| 15 min | O60 The effect of motor imaginary on cortical activation during robot assisted gait in normal subject
<i>Futoshi Wada</i> |
| 15 min | O61 Visual and motor related activity in sci and normal subjects: a magnetoencephalography study of plastic changes in the brain.
<i>Roger Bodley</i> |

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| 15 min | O62 Autologous incubated macrophage treatment in complete spinal cord injury: results of the multicenter trial
<i>Daniel Lammertse</i> |
| 15 min | O63 Deveoplment of criteria for unexpected neurological change in a phase 1 sub-acute, complete spinal cord injury study
<i>Linda Jones</i> |
| 15 min | O64 Therapeutic anti-nogo-a antibodies in acute spinal cord injury - first information on safety and pharmacokinetics
<i>Rüdiger Rupp</i> |
| 15 min | O65 Preclinical and phase 1 development of oligodendrocyte progenitor cells derived from human embryonic stem cells for the treatment of spinal cord injury
<i>Edward Wirth</i> |
| 15 min | O66 Resistance to the physiological activities of fibroblast growth factor 23 (FGF23) following spinal cord injury (SCI)
<i>Ruth Marshall</i> |

13.30-14.30 Lunch

14.30-16.30 SPINAL CORD LESIONS IN CHILDREN

Chair: Tiziana Radaelli - Lawrence Vogel

14.30-15.00 OPENING LECTURE

- OL3 Participation and quality of life among youth with spinal cord injury
Lawrence Vogel

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- | | |
|--------|---|
| 15 min | O67 Comparison of child and parent reported activity performance and participation in children and youth with spinal cord injury
<i>Stephen M. Haley</i> |
| 15 min | O68 International standards for neurological classification of spinal cord injury: utility of motor, sensory and anorectal exams with children
<i>Mary Jane Mulcahey</i> |
| 15 min | O69 A review of the musculoskeletal, urologic and pulmonary complications in 118 patients with pediatric spinal cord injury
<i>Thomas Meiners</i> |
| 15 min | O70 Spinal tumours in childhood. A single institution experience of ninety-seven cases
<i>Barbara Spacca</i> |
| 15 min | O71 Scoliosis development following childhood spinal cord injury
<i>Ebba Bergström</i> |
| 15 min | O72 Ischemic spinal cord lesion in children
<i>Maria Letizia Salsano</i> |
-

08.00-10.00 FREE PAPERS Session 9

Chair: Hans Frankel - Martin McClelland

- 15 min 073 Threshold currents at the electrode-nerve interface of phrenic nerve stimulators are stable during patient survival time
Gerhard Baer
- 15 min 074 Respiratory dysfunction of spinal cord injury (SCI) patients. Optoelectronic plethysmography (OEP) evaluation
Maria Luisa Lapenna
- 15 min 075 Spirometric values importance in a decannulation protocol for quadriplegic tracheostomized patients
Libero Bianchi
- 15 min 076 Effects of lower thoracic spinal cord stimulation (SCS) on expiratory muscle function in subjects with spinal cord injury (SCI)
Krzysztof E. Kowalski
- 15 min 077 Intrathecal baclophen may improve breathing as well as walking
Ann-Katrin Karlsson
- 15 min 078 Quantification of spasticity in incomplete SCI subjects during a pedaling movement and influence of training with FES
Margit Gföhler
- 15 min 079 Extracorporeal shockwave therapy (ESWT) for the spasticity management in children with cerebral palsy – preliminary results
Gelu Onose
- 15 min 080 Treatment of HIP ARTHRITIS in SCI patients
Joanna Rome-Saulnier

10.00-10.30 Coffee Break

10.30-12.00 SYMPOSIUM

Imaging the Complications of SCI: What Can XXI Century Radiology Offer?

Chair: Roger Bodley

Introduction
Roger Bodley

S20 Imaging the Injured Cord in the Sub-Acute and Chronic Phase
Richard Hughes

S21 Imaging the Bony Spine in the Late Phase Post Injury
Rowena Warwick

S22 The role of Interventional Radiology in the management of patients with spinal cord injury
Wei Chuen Liong

S23 Imaging of the Renal Tract in Spinal Cord Injury
Tom Meagher

S24 SCI including respiratory, Bowel and Cardiovascular Issues
Roger Bodley

S25 Clinical Perspectives on Imaging Strategies in Chronic Spinal Injury
Ali Jamous

General Discussion - Questions

12.00-13.30

WORKSHOP

Exporting research and best practices to the bedside: standards for the neurological classification of spine cord injuries - 2009

Chair: William P. Waring

W46 Understand how the International Standards Training e-Learning Program (InSTeP) performs

Understand recent revisions in the International Standards for the Neurological Classification of Spinal Cord Injuries utilizing the revised InSTeP program

Understand the controversies with revising the AIS classification definitions and the use of non key muscle function

Understand the potential and limitations of a web based training course including the current psychometrics for InSTeP and proposed research for InSTeP

Understand the proposed additions to InSTeP for examination of children (WeeSTeP) and the Autonomic Standards (ASTeP)

Understand the proposed process for future review and revision of the international standards and in step

William P. Waring, Andrei Krassioukov, Ronald K. Reeves, Ralph J. Marino, Stephen Burns

13.30-14.30

Lunch

14.30-16.30

WORKSHOP

Therapeutic Intervention of Psychologists in Spinal Unit: Coping Effectiveness Training

Chair: Paul Kennedy

Introduction

Silvia Lapini

W47 Coping effectiveness training in SCI
Paul Kennedy

W48 Discussion on experiences in psychoeducational group activity
Marina Manera

W49 The experience of SU Niguarda
Gabriella Rossi

W50 The experience of the psychological treatment with the groups at
the Montecatone Rehabilitation Institute
Daniela Rossetti

08.00-10.00

URINARY INCONTINENCE

Chair: Manfred Stöhrer - Sauro Biscotto

08.00-08.30

OPENING LECTURE

OL4 Neurogenic Bladder and Urinary Incontinence
Manfred Stöhrer

30 min

O81 A technically reduced urodynamic measuring method compared with a conventional urodynamic study
Christian Niedworok

15 min

O82 Effective treatment of neurogenic detrusor overactivity (NDO) by combined low dosed antimuscarinics
Michele Spinelli

15 min

O83 A novel wearable device for controlling urinary incontinence by conditional neuromodulation
Michael Craggs

15 min

O84 Continent cutaneous urinary diversion and neurogenic bladder. About 21 patients.
Brigitte Perrouin-Verbe

15 min

O85 Sacral neuromodulation in children with neurogenic bladder
Giovanni Mosiello

10.00-10.30

Coffee Break

10.30-11.00

SYMPOSIUM

Sponsored by KCI

Pressure Ulcers in SCI: From Prevention to Advanced Treatment

Chair: Claudio Pilati

S26 Use of Special surfaces in the prevention of pressure ulcers
Andrea Cavicchioli

S27 Histological evidences of the effectiveness of negative pressure therapy
Franco Bassetto

11:00-12:30

NEW TREATMENTS FOR PRESSURE ULCERS

Chair: Maria Julia D'Andrea Greve - Manlio Ottonello

- | | |
|--------|--|
| 15 min | O86 Application of Skin Traction for the Treatment of Grade-IV Pressure Sore: A Clinical Report of 160 Cases
<i>Xi Chen</i> |
| 15 min | O87 New treatments for pressure ulcers - Don't forget the maggot therapy
<i>Yorck B. Kalke</i> |
| 15 min | O88 The joint venture between a dermal substitute and platelet growth factors: a novel approach to cutaneous ulcer repair
<i>Giulia Lo Russo</i> |
| 15 min | O89 Electrical stimulation-Induced Gluteal and Hamstring Muscle Activation Can Reduce Sitting Pressure In individuals With Spinal Cord injury
<i>Christof A.J. Smit</i> |
| 15 min | O90 Evaluation of a new treatment and rehabilitation programme for patients with spinal cord injury and pressure sores
<i>Anders Ljung</i> |
| 15 min | O91 VAC Therapy: Critical analysis between clinical and Histological results
<i>Manlio Ottonello</i> |
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SATURDAY 24 OCTOBER

08.00 - 12.30

SYMPOSIUM

Sponsored by Wings for Life (WFL)

ISCOs 2009 PREVENTION SYMPOSIUM

Chair: Doug Brown

- | | | |
|--------|-----|---|
| 40 min | S28 | Overview of Prevention of SCI due to Road Traffic Crashes
<i>Michale Fitzharris</i> |
| 20 min | S29 | Biomechanics of the Pediatric Spine
<i>Marcus Pandy</i> |
| 20 min | S30 | Spinal Cord Injury Epidemiology: In which cases a prevention device could be used
<i>Michael J. Devivo</i> |
| 20 min | S31 | Spinal Cord Injury incidence in Europe
<i>Rupert Kisser</i> |
| 20 min | S32 | Spinal Cord Injury incidence in Sport
<i>Andrei Krassioukov</i> |
| 20 min | S33 | Neurosurgical perspective on prevention: what are the spinal cord weak points?
<i>Florian Roser</i> |
| 20 min | S34 | Biomechanics of SCI and example of a marketable device: Leatt Brace
<i>Cornel de Jongh</i> |

10:00 - 10:30

Coffee Break

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|--------|-----|---|
| 10 min | S35 | Report of Sub-Committee on Global Mapping of SCI
<i>Peter Wing</i> |
| 20 min | S36 | YIPES! An education and prevention program for young people: Youth Injury Prevention Education @ Shepherd.org
<i>Herndon Murray</i> |
| 20 min | S37 | Report of Sub-Committee on Prevention of SCI in Water Activities. Diving Injuries: Are they really preventable? A Sisyphean challenge?
<i>Herndon Murray</i> |
| 10 min | S38 | Catastrophic rugby injuries in Italy: Prevention measures that are taken and their success
<i>Vincenzo Ieracitano, Claudio Pilati</i> |

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|--------|-----|---|
| 20 min | S39 | Prevention of SCI due to high falls
<i>Tancredi Moscato, Mario Carletti</i> |
| 20 min | S40 | Prevention of SCI due to low falls in older fallers
<i>Clemens Becker</i> |
| 20 min | S41 | Natural disasters and building construction. The Sichuan Earthquake
<i>Eric Weerts</i> |

12.30 - 13.30 CLOSING CEREMONY

BEST PAPER AND BEST POSTER AWARD

PRESENTATION 2010



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