

Conference of the International Society for Postural and Gait Research

ISPGR 2003

The Scientia

Sunday, 23 March 2003
to
Thursday, 27 March 2003

Monday, 24 March 2003

Poster Display: Ageing and Balance

Poster Leighton Hall

08:30 AM - 05:00 PM

- Effects of Cerebral Blood Flow Changes on Postural Stability
Ms Alison Oates
- Evaluation of the effects of alcohol on standing gait
Dr Neil Longridge
- Characterization of the instability of elderly persons during one-leg standing
Dr Marcos Duarte
- Determinants of reduced functional mobility in healthy elderly women
Ms Nicole Quinn
- Effects of ageing on the head and trunk movements during walking
Dr Yasuhiko Takei
- Postural stability in elderly persons with gait problem
Prof Kiichiro Taguchi
- Postural stability -- a tentative model for clinical understanding
Ms Britt Schumacher Mohr
- Differences between young and elderly adults in temporal measurements when crossing over an obstacle
Dr Mark Latt
- Energetic cost in "Timed up and Go" test in frail older people with postural abnormalities
Patrick Manckoundia for France Mourey
- Age-related changes in concentric and eccentric muscle strength in the lower and upper extremity: a cross-sectional study
Ms Kim Delbaere
- Decreased trunk angular displacement during sitting down: an early feature of ageing
Ms Veronique Dubost

Poster Display: Anticipatory Postural Control

Poster Leighton Hall

08:30 AM - 05:00 PM

- Dance-like pointing with the leg: postural expertise and associated anticipatory postural adjustments
Mr Hadrien Ceyte
- Postural changes induced by low back pain reflect an alternate postural strategy not simply pain
Paul Hodges for Lorimer Moseley
- Anticipatory postural control and P300 during bilateral arm movement by oddball paradigm
Prof Katsuo Fujiwara
- Speed and accuracy trade-off during whole body movements in upright standing
Dr Marcos Duarte
- Anticipatory postural control and P300 during bilateral arm movements by oddball paradigm in older
Ms Michie Shigeiwa

Poster Display: Basic Control Mechanisms

Poster Leighton Hall

08:30 AM - 05:00 PM

- 8:30am Brain activation patterns during imagined stance and locomotion
Erich Schneider for Klaus Jahn
- Does the spinal cord understand standing up?
Dr Brian Day
- Control Pattern of a Combined Task
Dr Aftab Patla
- Air-righting reflex in the decerebrated rat
Mr Ken Masuda
- Vertebral column and evolution
Prof Alessandro Nutini
- Task-specific neural and biomechanical prerequisite for motor fluidity in rising to walk
Mr François Tremblay
- Initial posture and inertial loading of the head and neck influence muscle and joint kinematics in the

Dr Emily Keshner
Whole body modelling: application to rowing an ergometer

Dr Floren Colloud
Medio lateral sway and afferent input in quiet stance

Dr Mark Goss-Sampson
Beyond sliding doors: use of perception-action coupling

Mr Michael Cinelli
Fictive locomotion evoked by stimulation of cervical spinal cord in rats

Mr Sei-etsu Fujiwara
The effect of cerebral functions in erect standing posture

Prof Masahiko Yamamoto
Asymmetries in bilateral vertical jump take-off

Mr Nat Benjanuvatra
Electromyographic activities of the longissimus muscle and kinematics of the trunk and limbs during level, upslope and downslope treadmill walking in cats

Dr Naomi Wada
Initial component of sit-to-stand motor pattern is different from initial component of sit-to-walk motor

Dr Aftab Patla
The examination of the quantitative evaluation method of Body Tracking Test (BTT)

Dr Tomoe Yoshida
Evidence that corticospinal pathways facilitate ia presynaptic gating during stance to swing transition

Dr Cyril Schneider
Head in the Direction of the Flow

Ms Kristen Hollands

Poster Display: Falls in the Elderly

Poster	Leighton Hall	08:30 AM - 05:00 PM
8:30am	<p>The development of a validated falls risk screening assessment for use in general practice <i>Ms Anne Tiedemann</i></p> <p>Characteristics of physical and psychological factors related to repeated falls in the elderly <i>Dr Michiko Yuki</i></p> <p>Is dual task testing more sensitive to detect gait improvement after a balance training program? <i>Dr Kamiar Aminian</i></p> <p>The effects of 24 weeks whole body vibration training on postural control in the elderly <i>Dr Sabine Verschueren</i></p> <p>Individualised, graded, tailored exercise programs resulting from identification of specific physiological falls risk factors in community-dwellers aged 75 + <i>Mrs Sally Castell</i></p> <p>Can walking aids impede compensatory stepping? <i>Prof Brian Maki</i></p> <p>Gait variability & fractal dynamics of older adults with high level gait disturbances <i>Jeffrey Hausdorff for Talia Herman</i></p> <p>Attention Shifting Between Posture Control and Secondary Cognitive Task: Effects in Aging <i>Marjorie Woollacott for Joseph Siu</i></p> <p>Acceleration patterns of the head and pelvis when walking are associated with risk of falling in community-dwelling older people <i>Dr Hylton Menz</i></p> <p>Associations of age and falls risk with decision and movement components of choice stepping reaction <i>A/Prof Stephen Lord</i></p> <p>A randomised controlled trial of weight-bearing versus non-weight-bearing exercise for improving physical ability after hip fracture and completion of usual care <i>Dr Catherine Sherrington</i></p>	

Poster Display: Foot and Ankle

Poster	Leighton Hall	08:30 AM - 05:00 PM
	<p>Walking with the Masai Barefoot Technique <i>Ms Jacqueline Romkes</i></p>	

Poster Display: Gait and Gait Perturbation

Poster Leighton Hall

08:30 AM - 05:00 PM

Medial-lateral trunk perturbations during gait along a narrow walkway: influences of the lower field of vision and prior knowledge on foot placement modifications

Mr Stephen Hill

Why do we fail when approaching and stepping over an obstacle after vision was removed five steps before?

Mr Michael Greig

Corticospinal control of human gait and predictability of environment: a TMS study

Mr Mickael Camus

Online Use of Environmental Information to Modify Adaptive Step

Mr Luiz Santos

Latencies of obstacle avoidance reactions

Mrs Vivian Weerdesteyn

Assessing the reliability of gait velocity

Dr Keith Rome

Instrumented shoes for pathological gait assesment

Mr Arnaud Faivre

Reliability of the gaitrite walkway system for the quantification of temporo-spatial parameters of gait in young and older people

Ms Marcella Mun San Kwan

Biomechanical characterization of walking in shallow water

Dr Marcos Duarte

The Effect of Lateral Arm Raises on Walking Balance

Dr Aftab Patla

Poster Display: Motor Development

Poster Leighton Hall

08:30 AM - 05:00 PM

Movement analysis of the functional reach test in children.

Clarissa Martin for Kate Carroll

Intra- and intersubject variability in gait analysis data in spastic children

Dr Yvonne Janssen-Potten

Balance in Young Ballet Dancers

Dr Dawne Larkin

Body Scheme and postural control in 14-15 year-old teenagers : a proprioceptive neglect hypothesis

Dr Marianne Vaugoyeau

Locomotor skills and balance strategies in children with internal rotations of the lower limbs

Dr Christine Assaiante

Poster Display: Multi-sensory integration

Poster Leighton Hall

08:30 AM - 05:00 PM

Can postural sway be predicted by ankle proprioception?

Ms Siu Fu

Man against gravity: the control of orientation and that of stabilisation are dissociated

Dr Dominic Perennou

Adaptation of Multi-joint Movements during Postural Disturbances

Prof Rolf Johansson

Effects of hypothermic anesthesia of the feet on vibration-induced body sway and adaptation.

Prof Måns Magnusson

Assessment of the accurate movement performance in patients with complex regional pain syndrome (Type I) before and after additional sympathetic activation

Dr Sasa Radovanovic

Poster Display: Neurological Disorders and Rehabilitation

Poster Leighton Hall

08:30 AM - 05:00 PM

A gait orthosis for paraplegics with a motor-driven hip joint

Dr Yuji Ohta

Balance training effects on recovery of stability in children with cerebral palsy: EMG.

Prof Marjorie Woollacott
 Evaluation of efficacy nursing intervention to prevent patients with C.V.A. from falling into a bedridden

Dr Kayoko Kawahara
 Kinematic model of the spine: study of paraplegic subjects

Dr Didier Pradon
 Proprioceptive, Balance and Functional Deficits Across Acute, Subacute and Chronic Ankle Sprain

Mr Chich-Haung Richard Yang
 Postural sway changes following proprioceptive neuromuscular facilitation

Dr Mark Goss-Sampson
 Variable Practice to Facilitate Motor Learning for Countermeasures

Dr Helen Cohen
 Effects of a treatment program on balance retraining in patients with cerebellar ataxia

Prof Ray-Yau Wang
 Physiotherapy in the rehabilitation of stroke patients. Bobath or motor relearning program? A follow-up 1 and 4 years post-stroke. A randomised, controlled study

Ms Birgitta Langhammer
 The effect of pseudomonas aeruginosa infection in rehabilitation and gait of patients with severe burn trauma

Dr Fariba Fayaz
 Effects of ankle angle on dynamic knee stability during AFO use in brain injured and spinal cord injured patients

Dr Yvonne Janssen-Potten
 Correlation between gait velocity and motor impairment in multiple sclerosis

Prof Philippe Thoumie
 Movement time during transfer from sitting to standing and back to sitting in elderly people: comparison between demented and control subjects

Patrick Manckoundia for France Mourey
 EMG-analysis of the leg muscles in hemiplegic children with and without hinged ankle-foot orthoses

Ms Jacqueline Romkes
 Posturography as a screening test for primary orthostatic tremor

Dr Mikael Karlberg

Poster Display: Orthopaedics

Poster Leighton Hall 08:30 AM - 05:00 PM
 Post-total knee arthroplasty patients use different strategy for recovery following medial-lateral rotating perturbation

Mr William Gage
 Biomechanical study of balance recovery following a forward fall in patients with an anterior cruciate ligament lesion

Prof Philippe Thoumie

Poster Display: Parkinson's Disease

Poster Leighton Hall 08:30 AM - 05:00 PM
 Static versus dynamic postural control, Parkinson's disease subjects evaluation

Dr Serge Mesure
 Gait changes in naive Parkinson's disease patients

Jeffrey Hausdorff for Rossitza Baltadjieva
 The effect of PIRIBEDIL on quiet stance in Parkinson's disease

Dr Ludmila Chernikova
 Auditory timing modulation during gait in medicated and unmedicated Parkinson's disease

Prof Quincy Almeida
 Cues to improve gait in parkinsons disease: too much information?

Ms Robyn Galletly
 Effect of multiple tasks on gait in subjects with parkinson's disease: a functional test in the home

Dr Lynn Rochester
 Ambulatory measurement of gait parameters in parkinson's disease: effect of subthalamic stimulation

Dr Kamiar Aminian
 Quantification of trunk movements during turning in parkinson's disease (PD)

Mr Marten Munneke

Poster Display: Postural Perturbation

Poster Leighton Hall

08:30 AM - 05:00 PM

Postural stability under double-shot transient perturbations

Mr Hisato Ohno

Power spectral analysis of postural and autonomic responses induced by roll visual motion

Dr Mitsuhiro Aoki

The effect of temporal delayed sequences of roll to pitch perturbations on posture control

Mr Christian Grüneberg

Analysis of changes in sensory feedback using imposed disturbances

Prof Akimasa Ishida

Suboptimal Balance Strategy in Persons with Low Back Pain

Ms Nicola Mok

Changes in control of eye movement and upper limb movement with automatization of postural control during platform oscillation

Mr Hiroshi Toyama

Characteristics of protective stepping strategies in response to multi-directional pulling perturbations in healthy older adults and mild-to-moderate stroke patients

Dr Pei-Fang Tang

Role of vision in control of upper-limb balancing reactions: is arm movement guided by a pre-formed spatial map?

Prof Brian Maki

Effects of vibration on stance and equilibrium

Joyce Fung for Cynthia Thompson

Ability to recover balance depends on base of support size

Mr Quan Hong

Postural control enhancements through consolidation and adaptation

Dr Fredrik Tjernström

Poster Display: Stroke

Poster Leighton Hall

08:30 AM - 05:00 PM

Temporal disorganization of the step-test after stroke

Dr Francine Malouin

Effects of proprioceptive neuromuscular facilitation on balance and mobility performance of individuals with chronic stroke: a preliminary report

Mr Chao Lee

The effect of weight bearing on postural reflexes in stroke

Mr Daniel Marigold

Does Exercise Involving Total Body Reciprocal Training Improve Gait & Balance in Chronic Stroke Survivors?

Prof Denise Gobert

Pusher behaviour in stroke patients: head vs trunk dynamic orientation in roll

Dr Dominic Perennou

Poster Display: Vestibular Function

Poster Leighton Hall

08:30 AM - 05:00 PM

8:30am

Can the N3 potential be evoked in normal subjects?

Ms Sally Rosengren

Are asymmetric otolith vestibulo-ocular responses a predictive factor for idiopathic scoliosis in children?

Dr Sylvette Wiener-Vacher

Postural and perceptual effects of galvanic vestibular stimulation while standing

Dr Richard Fitzpatrick

On gaze direction and postural responses to galvanic vestibular stimulation

Dr Richard Fitzpatrick

Neck muscle responses to abrupt gravitational change in human

Dr Mitsuhiro Aoki

Effects of head pitch on the perception of rotation during galvanic vestibular stimulation

Dr Brian Day

Effects of head pitch on the altered gait trajectory produced by galvanic vestibular stimulation

Dr Jane Butler

Changes in angular head position and primary afferent discharge induced by external galvanic vestibular stimulation (GVS) in the guinea pig

Mr Juno Kim

Bilateral lower limb responses evoked by unilateral vestibular stimulation in humans

Dr Jon Marsden

Velocity-dependent Importance of Vestibular Information for Postural Control on Tilting Surfaces

Ms JoAnn Kluzik

Anodal vestibular stimulation does not suppress vestibular reflexes in human subjects

Dr Ann Bacsí

Diagnostic significance of vestibular tests by galvanic stimulation

Dr Toshihisa Murofushi

Plenary 1

Plenary The Scientia, Ritchie Theatre

09:00 AM - 10:30 AM

9:00am The semicircular canal system and locomotor behaviour: a comparative and evolutionary perspective

Prof Fred Spoor

9:30am Electrical stimulation of the lumbar enlargement: a technique to induce stepping in paraplegic

Dr Elena Yu Shapkova

10:00am Robotics

Gordon Cheng

Basic Control Mechanisms 1

Parallel Session The Scientia, Breakout 1

11:00 AM - 12:30 PM

11:00am New protocol for Sit-to-Stand movement

Mr Demetrio Villanueva

11:15am Symmetry of ground reaction forces during rising to stand

Dr Wendy Gilleard

11:45am Looking around for eye-feet interaction

Dr Mark Hollands

12:00pm Perception-action coupling: passage through sliding doors

Mr Michael Cinelli

Parkinson's Disease 1

Parallel Session The Scientia, Breakout 2

11:00 AM - 12:30 PM

11:00am Sensorimotor and clinical factors in the prediction of future falls in Parkinson's Disease

Dr Graham Kerr

11:15am Falls and injuries in progressive supranuclear palsy (PSP)

Dr Bastiaan Bloem

11:30am Proprioception integration and postural orientation in Parkinson's disease

Dr Marianne Vaugoyeau

11:45am Improving cerebellar patients' eye movements improves their walking

Dr Dilwyn Marple-Horvat

12:00pm Multiple automatic postural adjustments prior to compensatory stepping in subjects with Parkinson's

Dr Marilee Stephens

12:15pm Effects of deep brain stimulation on postural control in Parkinson's disease

Dr Fay Horak

Motor Development

Parallel Session The Scientia, Breakout 1

02:00 PM - 03:30 PM

2:00pm Emergence of postural anticipation in babies coincides with acquisition of independent walking

Dr Christine Assaiante

2:15pm Postural Adjustments for the Control of Impact during Interceptive Action in Children

Ms Annieck Ricken

2:30pm Use of the Normalcy Index for assessment of gait abnormalities

Demetrio Villanueva for Marianna Romei

3:15pm The effect of dual-task demands on postural control in children with Developmental Coordination

Sandra Brauer for Leanne Johnston

Orthopaedics

Parallel Session The Scientia, Breakout 2

02:00 PM - 03:30 PM

- 2:00pm Presurgery knee joint loading patterns predict development of anterior knee pain after total knee
Ms Anne Smith
- 2:15pm Stabilisation of the knee joint during gait: implications for the development of knee osteoarthritis
Ms Daina Sturnieks
- 2:30pm Neuromuscular control in anterior cruciate ligament deficient and uninjured people
Prof Thomas Buchanan
- 2:45pm Voluntary activation failure of knee muscles in patients with acl deficiency and reconstruction
Dr Shih-Fen Hsiao
- 3:00pm A robust gait parameterization technique for hip arthroplasty outcome evaluation
Dr Kamiar Aminian

Anticipatory Postural Control

Parallel Session The Scientia, Breakout 1

04:00 PM - 05:30 PM

- 4:00pm Anticipatory postural adjustments associated with grasping a distant object with forward stepping movements
Prof Gantcho Gantchev
- 4:15pm Motor cortex may be involved in feedforward postural responses of the deep trunk muscles
Dr Paul Hodges
- 4:30pm Relationship Between Motor Unit Activity of Medial and Lateral Vasti Muscles
Ms Rebecca Mellor
- 4:45pm Postural constraint on locomotion triggering during step initiation
Dr Marie-Laure Mille
- 5:00pm Linear + Angular Foot Nystagmus: A Novel Perspective on the Control of Curvature in the Trajectory of Forward Locomotion
Prof Geoffrey Melvill-Jones
- 5:15pm Postural sway-tremor interactions during quiet stance
Dr Steven Morrison

Ageing and Balance

Parallel Session The Scientia, Breakout 2

04:00 PM - 05:30 PM

- 4:00pm Changes in postural stability in women aged 20 to 80 years
Mrs Nancy Low Choy
- 4:15pm Neuromuscular and behavioural influences on reaching performance in young and elderly women
Mr Fabio Feldman
- 4:30pm Mediolateral changes in postural stability with age when stepping
Mr Kevin Sims
- 4:45pm Altered balance and gait in elderly hypertensives: association between fractal index of gait and blood pressure
Dr Jeffrey Hausdorff
- 4:00pm Feedback and feedforward postural responses to continuous perturbations: age-related changes in balance control
Ms Nicoleta Bugnariu
- 5:00pm Dynamic Stability During Stair Descent in Older Adults
Dr Kate Hamel
- 5:15pm Anticipation of slippery floors and biomechanics of slips
Dr Rakié Cham

Tuesday, 25 March 2003

Plenary 2 - Clinical

Plenary The Scientia, Ritchie Theatre

08:30 AM - 10:00 AM

- 8:30am Diagnosis and management of patients with Parkinson's disease
Dr Bastiaan Bloem
- 9:00am Clinical diagnosis and management of patients with vestibular disorders
Michael Halmagyi
- 10:00am Effects of surgical interventions in patients with Parkinson's disease
Prof Philip Thompson

Vestibular Function

Parallel Session The Scientia, Breakout 1

10:30 AM - 12:30 PM

- 10:30am Galvanic vestibular stimulation alters elbow proprioception
Ms Joanna Knox
- 11:00am Idiosyncrasy of the subjective visual horizontal/vertical after unilateral vestibular deafferentation
Dr Anna Hafstrom
- 11:15am Head and eye movements during turning and centrifugation
Dr Steven Moore
- 11:30am Vestibular activation by bone conducted sound
Dr Miriam Welgampola
- 11:45am Vestibular Screening Tests
Ms Rebecca St George
- 12:00pm When is vestibular information important during walking?
Dr Leah Bent
- 12:15pm Gait Ataxia and Balance Improve After Vestibular Rehabilitation
Dr Helen Cohen

Parkinson's Disease 2

Parallel Session The Scientia, Breakout 2

10:30 AM - 12:30 PM

- 10:30am The Stochastic Structure of Postural Sway in Parkinson's Disease
Dr John Jeka
- 10:45am Training effect of audio-visual cues on sit-to-stand in patients with Parkinson's disease
Dr Margaret Mak
- 11:00am Acceleration patterns of the head and pelvis in people with Parkinson's disease
Dr Mark Latt
- 11:15am Changes in muscular activity at the onset of freezing in patients with Parkinson's disease
Dr Alice Nieuwboer
- 11:30am The effects of visual cues on gait on the biomechanics and motor control of gait in parkinson's disease
Prof Meg Morris
- 11:45am Relative contributions of visual and proprioceptive inputs during locomotion towards a target in Parkinson's disease
Prof Quincy Almeida
- 12:00pm Hysteresis effects of systematic speed manipulations on stride parameters in Parkinson patients
Dr Erwin van Wegen

Wednesday, 26 March 2003

Plenary 3 - Falls in the Elderly

Plenary The Scientia, Ritchie Theatre

08:30 AM - 10:00 AM

- 8:30am Reducing falls: from epidemiology and impaired function to prevention trials
Prof John Campbell
- 9:00am Physiological risk factors for falls
A/Prof Stephen Lord
- 10:00am Balance confidence modifies postural control
Prof Jim Frank

Gait and Gait Perturbation

Parallel Session The Scientia, Breakout 1

10:30 AM - 12:30 PM

- 10:30am The Development and Accuracy of Portable Motion Sensors
Dr Jan Jasiewicz
- 10:45am Pre-planned online turns: relationships between the pelvis and the inner foot
Ms Frances Huxham
- 11:00am Strategy of dividing attention between walking and different cognitive tasks in healthy young
Ms Veronique Dubost
- 11:15am Dynamic index of control of equilibrium during gait (D.I.C.E)
Dr Manh Cuong Do
- 11:30am Adaptation of gait in elderly women after sudden reduction of environmental lighting
Dr Rolf Moe-Nilssen
- 12:00pm The Influence of Cadence on Locomotor Adaptation to the Rotating Circular Treadmill
Dr Gammon Earhart
- 12:15pm Age-related decline of gait control under a dual-task condition
Ms Veronique Dubost

Falls in the Elderly

Parallel Session The Scientia, Breakout 2

10:30 AM - 12:30 PM

- 10:30am Psychological Factors Associated with Falls in Community-Residing Older Adults
Prof Debra Rose
- 10:45am Reduced hip extensor strength and increased weight are associated with falling in healthy elderly women
Ms Nicole Quinn
- 11:00am Physical frailty and avoidance of activities
Ms Kim Delbaere
- 11:15am Predictors of falls: bivariate and multivariate analyses
Prof Astrid Bergland
- 11:30am Resolving conflicts in task demands during balance recovery: does holding an object inhibit compensatory grasping?
Prof Brian Maki
- 11:45am Sensory-challenge balance exercises improve performance on multisensory reweighting and clinical balance measures in the fall-prone elderly
John Jeka for Leslie Allison
- 12:00pm Strength or agility training significantly reduces fall risk compared to posture training in 75 to 85 year old women with low bone density: a six month RCT
Ms Teresa Liu-Ambrose
- 12:15pm Comparison of two types of exercise regimes on selected functional abilities for community-dwelling elderly at risk of falling
Ms Jorunn Helbostad

Multi-Sensory Integration

Parallel Session The Scientia, Breakout 1

01:30 PM - 03:00 PM

- 1:30pm Co-existing Multicomponent Postural Coordination Patterns
Dr John Jeka
- 1:45pm Postural control shifts with sensory discordance
Dr Emily Keshner

- 2:00pm Coordination of gaze and body movements during simultaneous horizontal gaze shift and yaw surface perturbation
Ms Caroline Paquette
- 2:15pm Effects of optical blur on postural stability
Dr Graham Kerr
- 2:30pm Vibration to the posterior neck evokes fast emg responses of the lower leg, but mastoid vibration does not
Prof Måns Magnusson
- 2:45pm Multisensory reweighting in the fall-prone elderly: Comparison to healthy young and older adults
John Jeka for Leslie Allison

Stroke

Parallel Session The Scientia, Breakout 2

01:30 PM - 03:00 PM

- 1:30pm Effects of CNS lesions on Balance during Standing and Walking
Dr Joyce Fung
- 1:45pm Verticality perception in pusher patients: ipsi or contralateral bias?
Dr Dominic Perennou
- 2:00pm Limb Position Sense Altered During Locomotion Post Stroke
Prof David Brown
- 2:15pm Electromyographic and kinematic characteristics of obstacle avoidance in stroke patients
Mr Rob den Otter
- 2:30pm Lead and trail limb control during obstacle crossing following stroke
Dr Catherine Said
- 2:45pm Strategies to improve walking following stroke
Dr Anouk Lamontagne

Basic Control Mechanisms 2

Parallel Session The Scientia, Breakout 1

03:30 PM - 05:00 PM

- 3:30pm EMG Analysis of A/P Balance During Quiet Standing
Prof David Winter
- 3:45pm Participation of holinergic system of neostriatum in regulation of posture adjustment in dogs
Prof Ksenia Shapovalova
- 4:00pm Multiple and parallel CNS mechanisms involved in the elaboration of bipedal locomotion by M.
Dr Futoshi Mori
- 4:15pm The Influence of Eye Movements on Postural Sway
Mr Erich Schneider
- 4:45pm Coordination of muscle activity during walking in cat and man
Prof Jens Bo Nielsen

Neurological Disorders & Rehabilitation

Parallel Session The Scientia, Breakout 2

03:30 PM - 05:00 PM

- 3:30pm Cognitive and gait evaluation in normal pressure hydrocephalus : Evaluation before and after ventriculoperitoneal shunt and comparison to parkinsonian gait
Prof Jean-Philippe Azulay
- 3:45pm Pathological gait in patients with acoustic neuroma
Prof Kazuo Ishikawa
- 4:00pm Gait abnormalities in people recently diagnosed with multiple sclerosis
Ms Clarissa Martin
- 4:15pm Correlates with poor dual task performance in acquired brain injury
Dr Sandra Brauer
- 4:30pm Differential Improvements In Joint Position Sense After Balance Training
Dr David Lloyd
- 4:45pm Ambulatory system for gait and posture analysis: validation in chronic pain patients treated by spinal cord stimulation
Dr Kamiar Aminian
- 5:00pm Learning different postural tasks in patients with poststroke hemiparesis, cerebellar ataxia and parkinsons disease
Dr Marat Ioffe

Thursday, 27 March 2003

Postural Perturbation

Parallel Session The Scientia, Breakout 1

09:00 AM - 11:00 AM

- 9:00am Ankle stiffness and human balance during upright standing
Dr Alexei Alexandrov
- 9:15am Effects of postural disturbances with fatigued triceps surae muscles or with 20% additional body weight
Mans Magnusson for Torbjorn Ledin
- 9:30am Thresholds for inducing protective stepping responses for the control of human balance
Dr Mark Rogers
- 9:45am Role of vision and visual attention in the control of rapid stepping reactions triggered by postural
Prof Brian Maki
- 10:00am Design of optimal perturbation signals for investigating human postural dynamics
Dr Stella Donker
- 10:15am Strategies for avoiding hip impact during sideways falls
Prof Stephen Robinovitch
- 10:30am Gaze direction influences postural control of the neck
Dr Michel Coppieters
- 10:45am Visual and platform perturbations produce out of plane postural reactions
Dr Emily Keshner

Foot and Ankle

Parallel Session The Scientia, Breakout 2

09:00 AM - 11:00 AM

- 9:00am Control of the flat versus normal foot during walking
Dr Adrienne Hunt
- 9:15am The evaluation of flat foot and gait analysis patterns of patients with down syndrome
Demetrio Villanueva for Manuela Galli
- 9:30am Effects of manual manipulations of the ankle and foot on quiet stance in young and elderly females
Dr Mark Goss-Sampson
- 9:45am The Effect of an Accommodative Foot Orthoses on Balance Parameters – pilot study
Dr Keith Rome
- 10:00am The variation of dynamic foot pressure with gait parameter
Mr Yat Chau Law
- 10:15am Force distribution beneath the foot when traversing a sideslope
Dr Stephen Urry
- 10:30am Effects of experimentally - induced plantar insensitivity on forces and pressures under the foot during normal walking.
Ms Mandy Taylor
- 10:45am Ground reaction forces associated with plantar callus formation
Dr Kate Springett

The Debate

Plenary The Scientia, Ritchie Theatre

11:30 AM - 12:30 PM