Sunday 1st August, 2004 cont.		
Session 3 S Chair: Mario Lafort	ports SM2004 Info	
13:30 - 14:15	Keynote Lecture, Pressure distribution measurement at the University Hospital Muenster: past,present and future uses Dieter Rosenbaum, University Hospital Muenster, Germany	
14:15 - 14:30	Plantar pressures and foot geometry in athletes of different ethnicity <i>Uwe G. Kersting, Jason Gumey, Dieter Rosenbaum</i>	
14:30 - 14:45	Temporal characteristic of foot rollover during barefoot jogging: Reference data for young adults A. de Cock, Dirk De Clercq, Tine Willems, Erik Vitvrouw	
14:45 - 15:00	Relationship between gait biomechanics and exercise-induced lower leg pain: a prospective study on risk factors  Tinne Willems, Erik Witvrouw, Anneleen De Cock, Dirk De Clercq	
15:00 - 15:15	Changes in plantar surface area under different loading conditions Bill Vicenzino, Thomas G. McPoil, Mark W. Cornwall	
15:15 - 15:30	Application of centre of pressure to indicate rearfoot inversion-eversion in a simulated shoe shop setting Sharon J. Dixon	
15:30 - 16:00	Coffee break	
Session 4 F Chair: Scott Wearin	Pressure technology applications ESM2004 Info. g, University of Queensland, Australia	
16:00 - 16:15	Clinical proficiency of Dutch podiatrists, pedorthists and orthotists regarding plantar pressure reduction Nick Guldemond, Pieter Leffers, Antal Sanders, Nicolaas Schaper, Geert Walenkamp	
16:15 - 16:30	Validity of the pedar mobile system of vertical force measurement during a long-term period Henri L.P. Hurkmans, Johannes B.J. Bussmann, Ruud W. Selles, Herwin L.D. Horemans, Eric Benda, Henk J Stam, Jan A.N. Verhaar	
16:30 - 16:45	Evaluation of a capacitive pressure sensor for joint contact stress measurements <i>Lorenzo Martinelli, Dieter Rosenbaum, Tommaso D'Alessio</i>	
16:45 - 17:00	Publicity of pressure distribution <i>Iveta Spodrina, Marcis Krumins, Aivars Vetra</i>	



Closing remarks Jim Woodburn, Peter Seitz

17:00

Weetwood Hal

# Meeting Overview

Thursday 29th July, 2004 .....

Registration, buffet and wine reception, welcome address **novel** workshops

Friday 30th July, 2004 .....

Registration, Scientific Day 1 Excursion to Thackray Medical Museum

Saturday 31st July, 2004 .....

Activity day: mountain biking, walking, or trail running in the Yorkshire Dales

Sunday 1st August, 2004 .....

Scientific Day 2 Banquet **novel award** ceremony



University of Leeds

## Host

Academic Unit of Musculoskeletal Disease School of Medicine, University of Leeds, 36 Clarendon Road, Leeds, LS2 9NZ, UK tel: +44 (0) 113 343 4938 fax: +44 (0) 113 244 5533

### Venue

Weetwood Hall Otley Road, Leeds LS16 5PS West Yorkshire, UK tel.: +44 (0)113 230 6000 fax: +44 (0)113 230 6095









emed scientific meeting 2004

Program



Leeds, UK, Jul. 29 - Aug. 1, 2004

Academic Unit of Musculoskeletal Disease School of Medicine, University of Leeds, Leeds, UK

for further details, please visit www.ESM2004.info

## ESM2004 Presentations

Thursday 29th July, 2004 .....

Welcome to ESM2004	
18:00 - 21:00	Registration
18:30 - 21:00	Buffet and Wine Reception(Piano: Hattnew Witnam) Welcome address: Jim Woodburn (Foot pressure distribution measurement in Leeds: work in progress in the field of rheumatology)
18:30 - 20:30	novel (GmbH) Workshops : Workshop I Hardware (emed recorder, pedar-x, pliance-x, sensors) Workshop II Software (Databases, Projects, Reports, Clinics, Diabetes software)

Friday 30th July, 2004		
Session 1	Biomechanics I Iburn, University of Leeds, UK	
7:30 - 8:30 8:30 - 9:15	Registration Keynote Lecture, a personal perspective on past, current and future use of foot pressure measurement Professor Leslie Klenerman	
9:15 - 9:30	Using pressure distribution technology for evaluating foot function in toddlers	

9:30 - 9:45	Do ankle foot orthoses improve force and pressure distribution during standing in children with hemiplegia?  Advienne Hunt, Tara O' Rellly, Marie Megy, Bronwyn Thomas
9:45 - 10:00	Changes in foot geometry parameters in 30 infants during the first three years of independent walking Kerstin Bosch, Dieter Ros

10:00 - 10:15	Between-day reliability of repeated plantar pressure distribution	
	measurements in a normal population Dieter Rosenbaum, Uwe Kersting	

10:15 - 10:45	Coffee break

Session 2 Diabetes, Multiple Sclerosis and Rheumatoid Arthritis Chair: Dr Nick Guldemond, University Hospital Maastricht, The Netherlands	
10:45 - 11:00	Synergistic effects of immuno-incompetence & plantar pressures on

Chair: Dr Nick Guldemond, University Hospital Maastricht, The Netherlands		
10:45 - 11:00	Synergistic effects of immuno-incompetence & plantar pressures on healing of neuropathic pedal ulcers treated by off-loading David R. Sinacore, Michael J. Mueller, Mary K. Hastings, Jeffrey E. Johnson	
11:00 - 11:15	Risk of plantar ulceration to the surviving foot in the patients with diabetic neuropathy following trans-tibial amputation Rajani V. Kanade, Patricia E. Price, Keith G. Harding, Robert W. van Deursen	
11:15 - 11:30	How are we walking in Georgia? Plantar pressure comparison in healthy and diabetic feet  Nana Tchlichinadze, Nugzar Pargalava, Tamar Kotaria, Tamar Tchlichinadze	
11:30 - 11:45	Loading pattern of the foot of patients with multiple sclerosis Tatiana L Tsvetkova, Igor D. Stoliarov, Magomed A. Abdurahmanov, Vlatcheslav V. Lebedev, Alexander G. Ilves	
11:45 - 12:00	Plantar sensitivity and pedobarographic patterns in patients with rheumatoid arthritis A. Schmiegel, M. Meermeier, D. Rosenbaum	
12:00 - 12:15	Reproducibility of plantar pressure measurements in patients with chronic arthritis Marike van der Leeden, Jos Dekker, Petra Slemonsma,	

Session 3 Chair: Dr Mark Col	NOVE awards Finalists I Seese ESIM2004 Informwall, University of Northern Arizona, USA
13:30 - 13:55	The effect of pes cavus on foot pain and plantar pressure  Joshua Burns, Jack Crosbie, Robert Owrier, Adrienne Hunt
13:55 - 14:20	Validity and reliability of plantar pressure measurements in the diabetic neuropathic foot: a comparison of three step-protocols Sicco A. Bus, Anthony de Lange
14:20 - 14:45	Testing the characteristics of replicas of stone age footwear discovered in the Oetz Italian alps Petr Hlavacek, Lenka Ostravska, Vaclav Gresak, Antonin Blaha, Jaromir Vaculik
14:45 - 15:15	Coffee break
Session 4 Chair: Dr Philip He	NOVE awards Finalists II SOUN ESIM 2004 Info
15:15 - 15:40	Gait Evaluation during Fracture Healing in Sheep Petra Seebeck, Mark Thompson, Abdul Parwani, Hanna Schell, Georg N. Duda
15:40 - 16:05	Forces acting in the forefoot during normal gait : a clinical application Christian Wyss
16:05 - 16:15	Final questions and closing remarks on the novel awards session Chairpersons Cornwall and Helliwell
16:15 - 16:30	Coffee break
Session 5	Posters www.ESM2004.info
16:30 - 17:30	Dynamic pedography in patients with diabetic polyneuropathy after orthopaedics surgery of the lower extremity Vasarhelyi A, Hansen T, Fritsch C, Mittmeler T.
	Biomechanical abnormalities in patients with high risk of foot ulcer or amputations Tatlana L. Tsvelkova, Alexandra N. Kushnir, Vadim B. Bregovsky, Zinaida V. Kruchkova
	Remote pressure distribution measurement data analysis and data collection: telemedicine project Alexander M. Volkov, Peter Seitz, Tatiana L. Tsvetkova, Christoph Fritsch, Viatcheslav V. Lebedev
	Prevention of plantar foot traumas in weight-lifting practice Vello Macellari, Carlo Varala, Claudia Giacomozzi
	Plantar orthoses: Towards a better design to improve their effectiveness in diabetic ulcer prevention
	Claudia Giacomozzi, Emanuela D'Ambrogi, Luigi Uccioli, Velio Macellari
	Changes of foot load and functional characteristics in the group of obese children during reduction of weight Lenka Kostelnikova, Petr Hlavacek
	Might normalisation techniques improve the correctness of plantar pressure measurements? Claudia Giacomozzi, Velio Macellari
	Foot function and morphology in different diabetic populations in New Zealand Uwe G. Kersting, Kelly Altken, Jason Gurney, Sharra Martin, Dieter Rosenbaum
	Posters of current work from the host institute Multi-segment foot motion during gait: proof of concept in rheumatoid arthritis Woodburn J, Nelson KM, Lohmann Siegel K, Kepple TM, Gerber LH
	Off-loading the painful forefoot in rheumatoid arthritis is characterised by changes to the regional velocity of the centre of pressure Turner DE, Helliwell PS, Wakefield RJ, Emery P, Woodburn J
	Debridement Of Plantar Callosities In Rheumatoid Arthritis: A Randomised Controlled Trial Davys HJ, Turner DE, Helliwell PS, Conaghan PG, Emery P, Woodburn J
	Off-the-shelf contoured orthoses demonstrate comparable mechanical properties to custom-made foot orthoses at less cost Redmond A, Landorf K, Keenan AM, Emery P

18:15 ~ Thackray Medical Museum Visit: lots of interactive displays for children. a wine and buffet reception provided, including gallery tour

### Saturday 31st July, 2004 .....

Activity day



9:30 - 19:00 getting to know each other with lots of fun outdoors hiking, biking, communicating, and celebrating



#### Sunday 1st August, 2004 .....

Session 1 Foot deformities and other pathologies Chair. Adrienne Hunt, The University of Sydney, Australia



	LOW
8:30 - 9:15	Keynote Lecture The art of using foot pressure systems as a clinical tool Rami Abboud, Department of Orthopaedic & Trauma Surgery, University of Dundee, UK
9:15 - 9:30	Sagittal thickness of the plantar fascia is related to static arch shape and regional loading of the foot in plantar fasciitis  Scott C. Wearing, James E. Smeathers, Bede Yates, Patrick M. Sullivan, Stephen R. Urry, Phillip Dubois
9:30 - 9:45	How to evaluate a result in conservative flatfoot surgery with dynamic pedobarography analysis? <i>Eric Toullec</i>
9:45 - 10:00	Detecting the presence of functional hallux limitus using Dynamic foot pressure S. Khamis, Z. Yızhar
10:00 - 10:15	Changes in the plantar pressure patterns after correction of hallux valgus deformity with the scarf osteotomy Timo J. Lorel, Dieter Rosenbaum, Hans Klarner, Christlan Kinast
10:15 - 10:30	The impact of exercising on school children with valgus heel and flatfeet Jilka Badurova, Hana Samsonová
10:30 - 11:00	Coffee break

### Session 2 Biomechanics II

12:00 - 12:15

12:15 - 13:30

Chair: Sharon Dixo	n, University of Exeter, UK
11:00 - 11:15	The problem of footwear for women in the final term of pregnancy Martina Cernekova, Petr Hlavacek
11:15 - 11:30	Off-loading the painful forefoot in rheumatoid arthritis is characterised by changes to the regional velocity of the centre of pressure Turner DE, Helliwell PS, Wakefield RJ, Emery P, Woodburn J
11:30 - 11:45	Accuracy of sensors and electronics with pedar-x insole measurements  Manfred Geuder, Axel Kalpen, Peter Seltz
11:45 - 12:00	Biomechanical Assessment of the structure and function of Birkenstock footbed technologies Laura E. Bray, Howard J. Hillstrom,

Casting methods and plantar pressure: The effects of custom made foot orthoses on plantar pressure distribution Nick Guldemond, Pieter