

6th REHAB MOVE
Congress

Groningen
The Netherlands
December 12-14, 2018
www.rehabmove2018.com

REHABILITATION: MOBILITY, EXERCISE & SPORTS

Program Wednesday, December 12, 2018

Keynote Lectures & Oral Presentations are in the 'Blauwe Zaal' (Blue Room) in the UMCG.

Breaks and exhibitions are in the 'Fonteinpatio' in the UMCG.

Poster Boards are in the 'Engelse Patio' of the UMCG.

Registration Desk and Speakers Upload Desk are situated next to the Fonteinpatio.

Abstracts via <http://www.rehabmove.nl>

Mobility

08.00 Registration with coffee & tea
Speakers Upload Desk Open

09.00 Opening
Dr. Riemer Vegter, Congress Chair
Prof. M. Joëls, Dean of the University Medical Center Groningen

Theme: Man-Machine Interfacing

Chair: Dr. Raoul Bongers

Keynote Lecture is sponsored by OIM

09.15 **Keynote Lecture 'Man-machine interfacing for the control of upper limb prostheses'**
Prof. Dario Farina

Session 1: Powered assistive technology

Chairs: Dr. Casper van Koppenhagen & Dr. Helco van Keeken

10.00 Oral presentations (3)

A-1: MYOELECTRIC ASSISTIVE DEVICES: DOES EMG PATTERN DISTINCTNESS REFLECT CONTROL ABILITY

AW Franzke, MB Kristoffersen, CK Van der Sluis, RM Bongers, A Murgia
University of Groningen, GRONINGEN, Netherlands

A-2: CAN LOW-COST MOTION CAPTURE SYSTEMS BE USED TO MEASURE ACCURATELY JOINT REACTION IN POWERED-EXOSKELETON USERS?

ML Lancini¹, FA Fornaser², PS Pasinetti¹
¹University of Brescia, BRESCIA, Italy; ²University of Trento, TRENTO, Italy

A-3: A FRAMEWORK OF EXOSKELETON-SKILL-TESTS IN PATIENTS WITH COMPLETE SPINAL CORD INJURY

R.B. van Dijksseldonk¹, I.J.W. van Nes², H. Rijken², H. van de Meent², N.L.W. Keijsers²
¹Sint Maartenskliniek, NIJMEGEN, Netherlands

10.45 Coffee break & Exhibition & Posters

Session 2: Daily Mobility Optimization

Chairs: Prof. Dirkjan Veeger & Dr. Rienk Dekker

11.15 Oral presentations (4)

A-4: OPTIMIZING MANUAL WHEELCHAIR SETTINGS USING NUMERICAL SIMULATION TO IMPROVE MOBILITY IN VARIOUS DAILY-LIFE ACTIVITIES

S. Hybois¹, J. Bascou², F. Lavaste³, H. Pillet³, C. Sauret³

¹Institut de Biomécanique Humaine Georges, Arts et Métiers ParisTech, PARIS, France ; ²Centre d'Etudes et de Recherche sur l'Appareillage des Handicapés, CRÉTEIL, France ; ³Institut de Biomécanique Humaine Georges Charpak, Arts et Métiers ParisTech, PARIS, France

A-5: FACTORS ASSOCIATED WITH TRANSFER INDEPENDENCE IN MEN WITH PARAPLEGIA

R.E. Cowan¹, A.A. Guccione², R.E. Keyser², D. Murray², C.S. Fitzmaurice¹, A. Rounds³, I. Ljungberg³, S. Groah³

¹University of Miami Miller School of Medicine, MIAMI, FL, United States of America; ²George Mason University, FAIRFAX, VA, United States of America; ³MedStar Health Research Institute, HYATTSVILLE, MD, United States of America

A-6: WHEELCHAIR USERS' SUPRASPINATUS TENDONS CHANGE WITH LOADING: RELATIONSHIP WITH THE SUBACROMIAL SPACE AND SUBJECT CHARACTERISTICS

FM Bossuyt¹, U Arnet¹, A Cools², ML Boninger³

¹Swiss Paraplegic Research and University of Luzern, NOTTWIL, Switzerland

²University of Ghent and University of Copenhagen, GHENT, Belgium

³Department of Veterans Affairs and University of Pittsburgh, PITTSBURGH, United States of America

A-7: THE ROLL-OVER SHAPE WHILE WALKING WITH AND WITHOUT ANKLE-FOOT ORTHOSES IN CHILDREN WITH CEREBRAL PALSY

YL Kerkum¹, H Houdijk², MA Brehm³, AI Buizer⁴, J Harlaar⁵

¹OIM Orthopedie, ASSEN, Netherlands

²Amsterdam Movement Sciences- VU University, Human Movement Science, AMSTERDAM, Netherlands; ³Amsterdam

Movement Sciences- Academic Medical Center, dept. Rehabilitation, AMSTERDAM, Netherlands; ⁴Amsterdam Movement

Sciences- VU University medical center, dept Rehab. medicine, AMSTERDAM, Netherlands; ⁵Delft University of Technology,

Department of Biomechanical Engineering, DELFT, Netherlands

12.15 Lunch break & Exhibition & Posters

Theme: Motor learning

Chair: Dr. Helco van Keeken

Keynote Lecture is sponsored by Procure

13.30

Keynote Lecture 'Motor learning in neurological rehabilitation'

Prof. Mindy Levin

Session 3: Biomechanics & Motor Control

Chairs: Dr. Han Houdijk & Dr. Aline Vrieling

14.15 Oral presentations (5)

A-8: BIOMECHANICAL EFFECTS OF TWO DIFFERENT CHOPART PROSTHESES DURING LEVEL GROUND WALKING

TK Kaib¹, JB Block², DH Heitzmann², AM Alimusa², SW Wolf²

¹HEIDELBERG, Germany; ²University Hospital, HEIDELBERG, Germany

A-9: WALKING ADAPTABILITY TRAINING IN PEOPLE AFTER STROKE: A RANDOMIZED CONTROLLED TRIAL

C Timmermans¹, M Roerdink¹, CGM Meskers², PJ Beek¹, TWJ Janssen¹

¹Vrije Universiteit Amsterdam, AMSTERDAM, Nederland

²VU Medical Center, AMSTERDAM, Nederland

A-10: MOTOR LEARNING OUTCOMES OF WHEELCHAIR PROPULSION DURING SPINAL CORD INJURY REHABILITATION AND IN EXPERIENCED USERS

M.T. Leving¹, S. De Groot¹, R.J.K. Vegter¹, F.A.B. Woldring², M. Tepper², L.H.V. Van der Woude¹

¹GRONINGEN, Netherlands

²University Medical Center Groningen, GRONINGEN, Netherlands

A-11: ARE INDIVIDUALS WITH UNILATERAL TRANSTIBIAL AMPUTATION ABLE TO ADAPT TO AN ACUTE PROSTHETIC INTERVENTION?

AR De Asha¹, RJ Foster², T Skervin², CT Barnett³

¹C-Motion Inc., GERMANTOWN, United States of America; ²Liverpool John Moores University, LIVERPOOL, United Kingdom;

³Nottingham Trent University, NOTTINGHAM, United Kingdom

A-12: PROPULSION BIOMECHANICS DURING WHEELCHAIR TURNING MANOEUVERS IN YOUNG ABLE-BODIED MEN AND WOMEN

D. Chaikhot¹, M.J.D. Taylor², F.J. Hettinga³

¹University of Essex, School of Sports, Colchester, United Kingdom

²University of Essex - School of Sports, Colchester, United Kingdom

³University of Essex, School of Sport, Rehabilitation and Exercise Sciences, COLCHESTER, United Kingdom

15.30 Tea break & Exhibition & Posters

Session 4: Motor Skill Acquisition

Chairs: Dr. Astrid Balemans & Dr. Marina Schoemaker

16.00 Oral presentations (4)

A-13: THE EFFECTIVENESS OF VIDEO GAME-BASED BALANCE TRAINING IN CHILDREN WITH CEREBRAL PALSY

P. Meyns¹, C. Bras², J. Harlaar³, L. Van de Pol², F. Barkhof², A.I. Buizer²

¹Hasselt University, DIEPENBEEK, Belgium; ²VU University Medical Center, AMSTERDAM, Nederland; ³Delft University of Technology, DELFT, Nederland

A-14: HANDRAIL HOLDING ON A SPLIT-BELT TREADMILL REDUCES LOCOMOTOR LEARNING

TJW Buurke, CJC Lamoth, D Vervoort, LHV van der Woude, AR den Otter

University of Groningen, University Medical Center Groningen, GRONINGEN, Nederland

A-15: TRAINING MOVEMENTS FOR DISTINCT ELECTROMYOGRAM PATTERNS USING SERIOUS GAMING

MB Kristoffersen¹, AW Franzke¹, A Murgia², RM Bongers², CK van der Sluis¹

¹University of Groningen, UMCG, Department of Rehabilitation Medicine, GRONINGEN, Netherlands

²University of Groningen, UMCG, Center for Human Movement Sciences, GRONINGEN, Netherlands

A-16: INTENSIVE WHEELED MOBILITY WORKSHOPS FOR PHYSIOTHERAPISTS AND OCCUPATIONAL THERAPISTS - A LESSON TO BE LEARNED

Qsnat Fliess Douer¹, Amos Pollack², Dalit Romem³, Elisheva Daube³

¹Sylvan Adams Sport Institute at Tel Aviv University, TEL AVIV, Israel; ²The Academic College at Wingate Isnatitute, NETANYA, Israel; ³Rehabilitation and Mobility Unit, Ministry of Health, Israel Government, TEL AVIV, Israel

17.00 Welcome Reception with refreshments and snacks

The Drinks are offered to you by the University of Groningen, the Municipality of Groningen and the Province of Groningen

Theme: Data & Society

Chair: Prof. Thomas Janssen

Keynote Lecture is sponsored by the city of Groningen

18.00 **Keynote Lecture 'The future of rehabilitation: digital infrastructure empowers networks of patients and professionals'**

Dr. Bert Mulder

18.45 Ability Battle Hackathon

19.30 – 21.30 Buffet and awards Ability Battle Hackathon

Restaurant of the University Medical Center Groningen

Program Thursday, December 13, 2018

Exercise

08.00 Registration with coffee & tea
Upload Desk Open

Theme: Adapted Physical Activity

Chair: Dr. Sonja de Groot

Keynote Lecture is sponsored by Share

08.30 **Keynote Lecture 'From Guidelines to Practice: The Development and Implementation of Disability-Specific Exercise Guidelines in Rehabilitation and Community Settings'**
Prof. Kathleen Martin Ginis

Session 5: Adapted Physical Activity

Chairs: Dr. Karin Gerrits & Dr. Noor Mouton

09.15 Oral presentations (4)

B-17: RE-AIM ANALYSIS OF A CANADIAN PEER MENTORING PROGRAM THAT PROMOTES PHYSICAL ACTIVITY

RB Shaw¹, SN Sweet², KR Todd¹, WK Adair³, CB McBride⁴, HL Flaro⁵, KA Martin-Ginis¹

¹The University of British Columbia, KELOWNA, Canada; ²McGill University, MONTREAL, Canada

³SCI Canada, TORONTO, Canada; ⁴SCI British Columbia, VANCOUVER, Canada; ⁵Ability New Brunswick, FREDERICTON, Canada

B-18: INTERRATER AND INTRARATER RELIABILITY OF VENTILATORY THRESHOLDS DETERMINED IN PEOPLE WITH SPINAL CORD INJURY

I Kouwijzer¹, R.E. Cowan², J.L. Maher², F. Groot³, F. Riedstra³, L.J.M. Valent¹, L.H.V. Van der Woude⁴, S. De Groot⁵

¹Heliomare Rehabilitation Center, WIJK AAN ZEE, Netherlands; ²University of Miami, MIAMI, United States of America; ³Sport- en Bewegingskliniek, HAARLEM, Nederland; ⁴University of Groningen, GRONINGEN, Netherlands;

⁵Reade, AMSTERDAM, Netherlands

B-19: CARDIOVASCULAR RISK FACTORS AND LEISURE TIME PHYSICAL ACTIVITY AMONG OLDER ADULTS WITH SPINAL CORD INJURY

S.J. Jörgensen¹, LS Magnusson¹, SS Svedevall¹, KMG Martin Ginis², J.L. Lexell³

¹Lund University, Skåne University Hospital, LUND, Sweden; ²School of Health and Exercise Sciences, University of British Columbia, KELOWNA, Canada; ³Lund University, Skåne University Hospital/Uppsala University, LUND, Sweden

B-20: ADAPTED PHYSICAL ACTIVITY AND FUNCTIONAL CAPACITY OF ADULTS WITH INTELLECTUAL DISABILITY OVER 40 YEARS-OLD

SS Santos, JR Ramos, ME Estevens, ES Sousa, FG Gomes
CRUZ QUEBRADA, Portugal

10.15 Coffee break & Exhibition & Posters

Session 6: ADL Implementation Guidelines

Chairs: Dr. Janneke Stolwijk & Dr. Monique Berger

10.45 Oral presentations (4)

B-21: PHYSICAL ACTIVITY AMONG PEOPLE WITH SPINAL CORD INJURY: A COMPARISON BETWEEN THE NETHERLANDS AND CANADA

F. Hoekstra¹, S. de Groot², J. Bruin³, L.H.V. van der Woude⁴, T. Hoekstra³, M.W.M. Post⁵, K.A. Martin Ginis¹

¹University of British Columbia, KELOWNA, Canada; ²Amsterdam Rehabilitation Research Centre, Reade, AMSTERDAM, Netherlands; ³Vrije Universiteit Amsterdam, AMSTERDAM, Netherlands; ⁴University of Groningen, University Medical Center Groningen, GRONINGEN, Netherlands; ⁵UMCG/RuG/Kenniscentrum Revalidatiegeneeskunde Utrecht, GRONINGEN, Netherlands

B-22: A PARTICIPANT-LED PHYSICAL ACTIVITY PROGRAMME FOR DISABLED PEOPLE WHO ARE READY TO BECOME PHYSICALLY ACTIVE

E.A. Jaarsma, B. Smith

University of Birmingham, BIRMINGHAM, United Kingdom

B-23: DEVELOPMENT AND VALIDATION OF PHYSICAL ACTIVITY PRACTICE GUIDES FOR AMPUTEES

MPL Pacheco Lopes¹, LMP Moniz-Pereira²

¹Faculty of Human Kinetic, University of Lisbon, CRUZ QUEBRADA, Portugal

²CIPER, Faculty of Human Kinetics, University of Lisbon, CRUZ QUEBRADA, Portugal

B-24: LONGITUDINAL ASSOCIATIONS BETWEEN ACTIVITY PACING, FATIGUE, AND PHYSICAL ACTIVITY IN ADULTS WITH MULTIPLE SCLEROSIS

US Abonie¹, S Bregje², F Hoekstra², T Hoekstra², CP Van der Schans², R Dekker², LHV Van der Woude², FJ Hettinga¹

¹School of Sport, Rehabilitation and Exercise Sciences, University of Essex, COLCHESTER, United Kingdom

²University of Groningen, University Medical Center Groningen, Center for Human S, GRONINGEN, Nederland

Poster session 1

11.45 Poster session

Abstracts with even code numbers (P2, P4, etc.)

12.30 Lunch break & Exhibition & Posters

Theme: Exercise Physiology

Chair: Dr. Han Houdijk

Keynote Lecture is sponsored by InBody

13.45 **Keynote Lecture ‘The Changing Landscape of Cardiac Rehabilitation; from early mobilization and reduced mortality to chronic multi-morbidity management’**
Prof. John Buckley

Session 7: Clinical Exercise Physiology

Chairs: Dr. Nicole Voet & Dr. Noël Keijsers

14.30 Oral presentations (4)

B-25: HOT BATHS: AN EFFECTIVE SUPPLEMENT TO EXERCISE IN DISABILITY?

C.A. Leicht¹, S.P. Hoekstra¹, S. Faulkner², N.C. Bishop¹, F. Tajima³, V.L. Goosey-Tolfrey¹

¹Loughborough University, LOUGHBOROUGH, United Kingdom; ²Nottingham Trent University, NOTTINGHAM, United Kingdom;

³Wakayama Medical University, WAKAYAMA, Japan

B-26: PEAK OXYGEN UPTAKE IN DIFFERENT UPPER-BODY EXERCISE MODES - A META-ANALYSIS

JK Baumgart, B Brurok, Ø Sandbakk

Centre for Elite Sports Research, TRONDHEIM, Norway

B-27: DIFFERENCES IN EXERCISE EFFECTS FROM STATIC VERSUS DYNAMIC STANDING IN NON-AMBULATORY CHILDREN WITH CEREBRAL PALSY

ÅB Tornberg¹, V Hansson², A Jakobsson², K Lauruschkus¹

¹Department of Health Sciences, Lund University, LUND, Sweden

²Mathematical Sciences, Lund University, LUND, Sweden

B-28: EFFECT OF RESPIRATORY MUSCLE TRAINING ON EXERCISE CAPACITY AND RESPIRATORY MECHANICS IN ATHLETES WITH TETRAPLEGIA

C.R. West¹, C.M. Gee¹, A.M. Williams¹, A.W. Sheel², N.D. Eves²

¹ICORD/University of British Columbia, VANCOUVER, Canada; ²University of British Columbia, VANCOUVER, Canada

15.30 Tea break & Exhibition & Posters

Session 8: Measurement during daily life

Chairs: Dr. Rita van den Berg & Dr. Rienk van der Slikke

16.00 Oral presentations (5)

B-29: ACTIVITY AND MOBILITY USING TECHNOLOGY (AMOUNT) REHABILITATION TRIAL- DESCRIPTION OF COMMUNITY PHASE INTERVENTION

LM Hassett¹, MEL Van den Berg², H Weber², S Chagpar³, S Wong⁴, A Rabie⁴, K Schurr⁴, MA McCluskey⁵, R Lindley⁶, M Crotty², C Sherrington³

¹School of Public Health/Faculty of Health Sciences, University of Sydney, SYDNEY, Australia; ²Department of Rehabilitation, Aged and Extended Care, Flinders University, ADELAIDE, Australia; ³School of Public Health, University of Sydney, SYDNEY, Australia; ⁴South Western Sydney Local Health District, SYDNEY, Australia; ⁵Faculty of Health Sciences, University of Sydney, SYDNEY, Australia; ⁶Westmead Clinical School, University of Sydney, SYDNEY, Australia

B-30: RECOVERY OF EXERCISE CAPACITY IN PEDIATRIC BURN PATIENTS: A PRELIMINARY INVESTIGATION

M. Akkerman¹, L.J. Mouton², S. de Groot³, A.S. Niemeijer⁴, S.M.H Scholten-Jaegers⁵, M.E. van Baar⁶, M.M. Stoop⁷, L.H.V. van der Woude², M.K. Nieuwenhuis⁵

¹Association of Dutch Burn Centres, GRONINGEN, Netherlands; ²Center for Human Movement Sciences, University of Groningen, UMCG, GRONINGEN, Netherlands; ³Amsterdam Rehabilitation Research Center | Reade, AMSTERDAM, Netherlands; ⁴Martini Academy, Martini Hospital, GRONINGEN, Netherlands; ⁵Association of Dutch Burn Centres, Burn Centre Martini Hospital, GRONINGEN, Netherlands; ⁶Association of Dutch Burn Centres, Burn Centre Maasstad Hospital, ROTTERDAM, Netherlands; ⁷Association of Dutch Burn Centres, Burn Centre Red Cross Hospital, BEVERWIJK, Netherlands

B-31: ECOLOGICAL MOMENTARY ASSESSMENT OF EXERCISE AND NEUROPATHIC PAIN EXPERIENCED BY MEN WITH SCI: PARTICIPANT PERCEPTIONS

K.R. Todd, R.B. Shaw, K.A. Martin Ginis
University of British Columbia, KELOWNA, Canada

B-32: ARE AMBULATORY PEOPLE WITH SPINAL CORD INJURY 'AT RISK' FOR INACTIVITY AFTER REHABILITATION?

K Postma¹, H.J.G. van den Berg-Emons², J.B.J Bussmann³, T. van Diemen⁴, M.W.M. Post⁵

¹Erasmus MC, ROTTERDAM, Nederland; ²Erasmus MC, University Medical Center Rotterdam, ROTTERDAM, Nederland; ³ErasmusMC, ROTTERDAM, Netherlands; ⁴Sint Maartenskliniek/De Hoogstraat/UMCG, Nederland; ⁵UMCG/RuG/Kenniscentrum Revalidatiegeneeskunde Utrecht, GRONINGEN, Netherlands

B-33: HIGH-INTENSITY INTERVAL TRAINING IN YOUTH WITH PHYSICAL DISABILITIES

M. Zwinkels¹, T Takken², J.M.A. Visser-Meily³, O Verschuren⁴

¹UMC Utrecht and De Hoogstraat Rehabilitation, UTRECHT, Nederland; ²Child Development and Exercise Center, UMC Utrecht, UTRECHT, Nederland; ³Department of Rehabilitation, Physical Therapy Science & Sports, UMC Utrecht, UTRECHT, Nederland; ⁴Center of Excellence for Rehabilitation Medicine, UMC Utrecht and De Hoogstraat, UTRECHT, Nederland

17.15 Break with refreshments

Theme: Big data / Machine Learning

Chair: Dr. Riemer Vegter

Keynote Lecture is sponsored by Össur

18.00 **Keynote Lecture 'Big data, big buzzwords, and big challenges'**
Prof. Andreas Daffertshofer

18.45 Closing

Walk to the Academy Building

19.00 Buffet at the Academy Building (University of Groningen)

22.00 - Pub Tour

Program Friday, December 14, 2018

Sports

08.00 Registration with coffee & tea
Upload Desk Open

Theme: Paralympic research future

Chair: Dr. Rienk Dekker

Keynote Lecture is sponsored by Lode

08.30 **Keynote Lecture 'Paralympic Research: Past, Present, Future'**
Prof. Walter Thompson

Session 9: Technological performance enhancement

Chairs: Prof. Coen van Bennekom & Dr. Monique Berger

09.15 Oral presentations (4)

C-34: KINEMATICS, KINETICS AND MUSCULAR ACTIVITY OF 15-S ALL-OUT HANDCYCLING EXERCISE IN ABLE-BODIED PARTICIPANTS

O. J. Quittmann¹, T. Abel¹, K. Albracht², H.-K. Strüder¹

¹German Sport University Cologne, COLOGNE, Germany

²FH Aachen University of Applied Sciences, AACHEN, Germany

C-35: ANALYSIS OF GROUND REACTION FORCES BY FOREARM CRUTCHES DURING INSTEP KICK IN AMPUTEE FOOTBALL

T.K Kobayashi¹, Y.U Urabe¹, H.F. Fujishita², J.S Sasada¹, N.M Maeda¹

¹Hiroshima University, HIROSHIMA, Japan

²Hiroshima University Hospital, HIROSHIMA, Japan

C-36: HOW DO WHEELCHAIR COURT SPORTS COMPARE REGARDING WHEELCHAIR MOBILITY PERFORMANCE?

R.M.A. van der Slikke¹, M.A.M. Berger¹, D.J.J. Bregman², H.E.J. Veeger²

¹The Hague University of Applied Sciences, DEN HAAG, Netherlands

²Delft University of Technology, DELFT, Nederland

C-37: THE NEED FOR PARA-CYCLING CLASSIFICATION RESEARCH

C.F.J. Nooijen, J. Liljedahl, A. Bjerkefors, T. Arndt

Swedish School of Sport and Health Sciences (GIH), STOCKHOLM, Sweden

10.15 Coffee break & Exhibition & Posters

Session 10: Physical performance enhancement

Chairs: Dr. Sonja de Groot & Prof. DirkJan Veeger

10.45 Oral presentations (4)

C-38: PERIOD PREVALENCE AND POINT PREVALENCE OF SPORTS-RELATED INJURIES AND ILLNESSES IN SWEDISH PARALYMPIC ATHLETES

KF Fagher¹, ÖD Dahlström², JJ Jacobsson², TT Timpka², JL Lexell¹

¹Rehabilitation Medicine Research Group, Lund University, LUND, Sweden

²Athletics Research Center, Linköping University, LINKÖPING, Sweden

C-39: EFFECT OF RESPIRATORY MUSCLE TRAINING ON PULMONARY AND CARDIOVASCULAR FUNCTION IN ATHLETES WITH TETRAPLEGIA

CM Gee, AM Williams, AW Sheel, ND Eves, CR West

VANCOUVER, Canada

C-40: ONABOTULINUMTOXIN A INJECTION FOR NEUROGENIC DETRUSOR OVERACTIVITY AND UPPER BODY EXERCISE PERFORMANCE IN WHEELCHAIR ATHLETES

C Perret, J Pannek

Swiss Paraplegic Centre, NOTTWIL, Switzerland

C-41: THE INFLAMMATORY RESPONSE TO EXERCISE IN SPINAL CORD INJURED INDIVIDUALS-THE INFLUENCE OF AUTONOMIC FUNCTION

SP Hoekstra¹, CA Leicht¹, YI Kamijo², T Kinoshita², BT Stephenson¹, VL Goosey-Tolfrey¹, NC Bishop¹, F Tajima²

¹Loughborough University, LOUGHBOROUGH, United Kingdom

²Wakayama Medical University, WAKAYAMA, Japan

Poster session 2

11.45 Poster session

Abstracts with odd code numbers (P1, P3, etc.)

12.30 Lunch break & Exhibition & Posters

Theme: Active Living / Recreational sports

Chair: Dr. Noor Mouton

Keynote Lecture is sponsored by Coloplast

13.45 **Keynote Lecture 'Promoting active living for disabled adults: Some modest suggestions'**

Prof. Brett Smith

Session 11: Recreational Sports

Chairs: Dr. Marina Schoemaker & Dr. Noel Keijsers

14.30 Oral presentations (4)

C-42: UNDERSTANDING THE TRANSITION INTO ELITE DISABILITY SPORT

A Papatomas¹, T Paulson²

¹Loughborough University, LOUGHBOROUGH, United Kingdom; ²English Institute of Sport, MANCHESTER, United Kingdom

C-43: SCAPULA CLUSTER AND MULTYBODY OPTIMIZATION FOR SCAPULAR TRACKING DURING WHEELCHAIR OVERHEAD SPORTS

D. Haering¹, S. Hybois², J. Bascou³, F. Lavaste², H. Pillet², P. Fodé², C. Sauret²

¹ENSAM, PARIS, France; ²Institut de Biomécanique Humaine Georges Charpak, PARIS, France

³CERAH, CRÉTEIL, France

C-44: OXYGEN SATURATION PROFILE OF PARTICIPANTS OF THE 2017 BRAZILIAN SCHOLARSHIP PARALYMPIC GAMES

JIG Gorla¹, JFF Fernandes Filho², AACs Costa e Silva³, JRB Buratti¹, NC Souza¹, DRC Callegari⁴, CDN Nogueira⁵, IBV Vieira⁶, AC Cliquet Junior⁷

¹University of Campinas, CAMPINAS, Brazil; ²Federal University of Rio de Janeiro, RIO DE JANEIRO, Brazil; ³Federal University of Pará, BELÉM, Brazil; ⁴State University of Maringá, MARINGÁ, Brazil; ⁵Universidade Castelo Branco, RIO JANEIRO, Brazil; ⁶San Antonio University of Murcia, MURCIA, Spain; ⁷Faculty of Medical Sciences - University of Campinas, CAMPINAS, Brazil

C-45: SPORTS PARTICIPATION, PHYSICAL ACTIVITY AND HEALTH-RELATED FITNESS IN YOUTH WITH CHRONIC DISEASES OR PHYSICAL DISABILITIES

K.M. Lankhorst¹, T. Takken², M. Zwinkels³, F. Backx⁴, L. van Gaalen¹, S. Te Velde¹, O. Verschuren³, H. Wittink¹, J. de Groot¹

¹University of Applied Sciences Utrecht, UTRECHT, Nederland; ²Wilhelmina Children's Hospital, UTRECHT, Nederland; ³De Hoogstraat Rehabilitation, UTRECHT, Nederland; ⁴University Medical Center Utrecht, UTRECHT, Nederland

15.30 Tea break & Exhibition & Posters

Theme: Athlete's perspective

Chair: Prof. Thomas Janssen

Keynote Lecture is sponsored by the city of Groningen

16.00 **Keynote Lecture 'Athlete's perspective'**
Esther Vergeer

16.45 Closing session
Dr. Riemer Vegter