



Posters with odd code numbers / Friday, December 14 / presenting authors are underlined

P1: CLASSIFICATION OF ATHLETES WITH COÖRDINATION IMPAIRMENT IN WHEELCHAIR RUGBY

K van Breukelen

IWRF, IWBF, IPCH, UCI, ORVELTE, Nederland

P3: SPINAL CORD INJURY AND TRAINING STATUS IMPACT THE DIFFERENTIATED RPE RESPONSE TO INCREMENTAL WHEELCHAIR PROPULSION

M.J. Hutchinson¹, J Kilgallon², C A Leicht², V L Goosey-Tolfrey²

LOUGHBOROUGH, United Kingdom; ²Loughborough University, LOUGHBOROUGH, United Kingdom

P5: CLASSIFICATION OF ARM COORDINATION IMPAIRMENT IN WHEELCHAIR RUGBY

V.C. Altman, B.E. Groen, S. van Berkum, G. van der Weijde, N.L.W. Keijsers

Sint Maartenskliniek, WAGENINGEN, Nederland

P7: ASSOCIATION BETWEEN CENTRAL SENSITIZATION AND LIFTING AND AEROBIC CAPACITY IN CHRONIC LOW BACK PAIN PATIENTS

J Ansuategui Echeita¹, MF Reneman², R Dekker², HR Schiphorst Preuper²

¹UMCG, GRONINGEN, Nederland

P9: DETERMINANTS OF PHYSICAL ACTIVITY IN WHEELCHAIR USERS WITH SPINAL CORD INJURY AND LOWER LIMB AMPUTATION

J.F.M. Holla¹, L.E. van den Akker¹, T. Dadema², B. Visser², L.J. Valent³, S. de Groot⁴, J.M. Dallinga², M. Deutekom²

¹Inholland University of Applied Sciences, HAARLEM, Netherlands; ²Amsterdam University of Applied Sciences, AMSTERDAM, Netherlands;

³Heliomare Rehabilitation Center, WIJK AAN ZEE, Netherlands; ⁴Amsterdam Rehabilitation Research Center, Reade, AMSTERDAM, Netherlands

P11: THE ACUTE AND CHRONIC EFFECTS OF HOT WATER IMMERSION ON INFLAMMATION AND METABOLISM

SP Hoekstra¹, NC Bishop¹, SH Faulkner², SJ Bailey¹, CA Leicht¹

¹Loughborough University, LOUGHBOROUGH, United Kingdom

²Nottingham Trent University, NOTTINGHAM, United Kingdom

P13: ANKLE BRACING FOR PRIMARY AND SECONDARY PREVENTION OF ACUTE ANKLE INJURIES IN ATHLETES: SYSTEMATIC REVIEW

I Barelids¹, AG van den Broek², BMA Huisstede³

¹Research Group Healthy Ageing, Hanze University of Applied Sciences, GRONINGEN, Netherlands

²Physical Therapy Sciences, University Medical Center Utrecht, UTRECHT, Netherlands

³Department of Rehabilitation, Physical Therapy Science & Sports, UMC Utrecht, UTRECHT, Netherlands

P15: DAILY ACTIVITY MONITORING OF ROBOTIC ARM SUPPORT USERS WITH MUSCULAR WEAKNESS

JMN Essers¹, A Peters², A Bergsma¹, A Murgia², K Meijer¹

¹University Maastricht, MAASTRICHT, Netherlands

²University Medical Center Groningen, GRONINGEN, Netherlands

P17: PHYSICAL ACTIVITY PROMOTION TO PEOPLE WITH SPINAL CORD INJURY BY HEALTH PROFESSIONALS: A SCOPING STUDY

TL Williams, N Giouridis, JR Tomasone

LEEDS, United Kingdom

P19: CHANGES IN PROPULSION TECHNIQUE AND SHOULDER COMPLEX LOADING FOLLOWING LOW-INTENSITY WHEELCHAIR PRACTICE IN NOVICES

M.T. Leving, R.J.K. Vegter, W.H.K. De Vries, S. De Groot, L.H.V. Van der Woude

GRONINGEN, Netherlands

P21: FEASIBILITY OF VIRTUAL REALITY TASK FOR ASSESSING WEIGHT-SHIFTING SKILLS IN AGING: A PILOT STUDY

V. de Rond, E.M.J. Bekkers, J. Orban de Xivry, A. Nieuwboer

KU Leuven, LEUVEN, Belgium

P23: GAIT OF ADULTS WITH INTELLECTUAL DISABILITIES, AND ITS ASSOCIATION WITH PHYSICAL FITNESS.

A Oppewal, T.I.M. Hilgenkamp

Erasmus MC, University Medical Center Rotterdam, ROTTERDAM, Nederland

P25: A PROSTHETIC LEG PROTOTYPE WITH IMPROVED MEDIOLATERAL BALANCE

Hal, E.S. van¹, Hijmans, J.M.², Postema, K.², Otten, E.¹

¹University of Groningen, University Medical Center Groningen, Center for Human Movement Sciences, Groningen, the Netherlands. ²

University of Groningen, University Medical Center Groningen, Department of Rehabilitation Medicine, Groningen, the Netherlands

P27: PARALYMPIC SPORTS CLASSIFICATION AND SPATIOTEMPORAL PARAMETERS OF WHEELCHAIR RACER IN MALE'S 100M SPRINT.

H.R JUNG¹, K.K LEE²

¹Kookmin univ., INCHEON, South-Korea

²Kookmin UNIV., SEOUL, South-Korea

P29: EFFECTS OF ROCKER SHOES ON PLANTAR FASCIA STRAIN IN PATIENTS WITH PLANTAR FASCIITIS

C Greve, R Dekker, K Postema, J.M. Hijmans

UMCG Groningen, GRONINGEN, Netherlands

P31: THE DIFFERENCES IN MUSCLE CONTRACTION PROPERTIES BETWEEN LOWER LIMB AMPUTEES AND ABLE-BODIED

HF Fujishita¹, YU Urabe², NM Maeda², KH Hirata¹, YM Mikami³, HK Kimura³, NA Adachi¹

¹Sports Medical Center, Hiroshima University Hospital, HIROSHIMA, Japan; ²Graduate school of biomedical & health sciences, Hiroshima University, HIROSHIMA, Japan; ³Division of Rehabilitation Medicine, Hiroshima University Hospital, HIROSHIMA, Japan

P33: VALIDATION OF THE MYJUMP2(TM) APP IN COUNTERMOVEMENT JUMP IN YOUNG CP FOOTBALL AMATEUR PLAYERS

AACS Costa e Silva¹, MB Barbalho², AFR Kleiner³, BC Callegari⁴, HAO Oliveira¹, JM Carvalho¹, RC Lima⁴, JI Gorla⁵, VS Coswig¹

¹Faculty of Physical Education. Federal University of Pará, BELÉM, Brazil; ²Center of Biological Sciences, Amazon University., BELÉM, Brazil;

³Unievangélica University Center, ANÁPOLIS, Brazil; ⁴Laboratory of Human Motion Studies, Federal University of Pará., BELÉM, Brazil;

⁵Laboratory of physical evaluation in exercise and sport adapted - FEF/Unicamp, CAMPINAS, Brazil

P35: THE EFFECTIVENESS OF EXERCISE-BASED TECHNOLOGIES IN REHABILITATION ON MOBILITY AND PHYSICAL ACTIVITY: AMOUNT REHABILITATION TRIAL

LM Hassett¹, MEL Van den Berg², R Lindley³, M Crotty², MA McCluskey⁴, H Van der Ploeg⁵, S Smith⁶, K Schurr⁷, C Sherrington⁸

¹School of Public Health/Faculty of Health Sciences, University of Sydney, SYDNEY, Australia; ²Department of Rehabilitation, Aged and Extended

Care, Flinders University, ADELAIDE, Australia; ³Westmead Clinical School, University of Sydney, SYDNEY, Australia; ⁴Faculty of Health Sciences,

University of Sydney, SYDNEY, Australia; ⁵VU University Medical Center Amsterdam, AMSTERDAM, Netherlands; ⁶Southern Cross University,

COFFS HARBOUR, Australia; ⁷South Western Sydney Local Health District, SYDNEY, Australia; ⁸School of Public Health, University of Sydney,

SYDNEY, Australia

P37: DETERMINANTS OF PHYSICAL ACTIVITY IN WHEELCHAIR-USING YOUTH WITH SPINA BIFIDA

MAT Bloemen¹, T Takken², JF De Groot¹, CLJJ Kruitwagen³, RA Rook¹, RHJG Van den Berg-Emons⁴, FJG Backx⁵

¹HU University of Applied Sciences Utrecht, UTRECHT, Nederland

²Child Development and Exercise Center, University Medical Center Utrecht, UTRECHT, Nederland; ³Department of Biostatistics and Research

Support, Julius Center, University Medi, UTRECHT, Nederland; ⁴Erasmus MC University Medical Center Rotterdam, ROTTERDAM, Netherlands;

⁵University Medical Center Utrecht, UTRECHT, Nederland

P39: THREE-DIMENSIONAL KINEMATICS OF COMPETITIVE AND RECREATIONAL RECUMBENT HANDCYCLISTS AT DIFFERENT SPORT SPECIFIC EXERCISE INTENSITIES

B. M. Stone¹, B. S. Mason¹, M. B. Warner², V. L. Goosey-Tolfrey¹

¹Loughborough University, LOUGHBOROUGH, United Kingdom

²University of Southampton, SOUTHAMPTON, United Kingdom

P41: PRACTICE EFFECTS ON LOW-INTENSITY SYNCHRONOUS HANDCYCLING IN ABLE-BODIED MEN: A BIOPHYSICAL APPROACH

C Kraaijenbrink¹, RJK Vegter², H Wagner³, LHV van der Woude²

¹Movement Science - WWU Muenster, MUENSTER, Germany; ²Center of Human Movement Sciences, GRONINGEN, Netherlands; ³Movement

Sciences - WWU Muenster, MUENSTER, Germany

P43: EFFECTS OF SEAT HEIGHT, WHEELCHAIR MASS AND GLOVE USE ON MOBILITY PERFORMANCE IN WHEELCHAIR BASKETBALL

M.J.M. Hoozemans¹, A.M.H. de Witte², R.M.A. van der Slikke², H.E.J. Veeger³, L.H.V. van der Woude⁴, M.A.M. Berger²

¹Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam, AMSTERDAM, Netherlands; ²The Hague University of Applied

Sciences, THE HAGUE, Netherlands; ³Department of Biomechanical Engineering, Delft University of Technology, DELFT, Netherlands; ⁴Centre for

Human Movement Sciences, University Medical Centre Groningen, GRONINGEN, Netherlands

P45: DEVELOPING EVIDENCE-BASED GUIDELINES FOR FUNCTIONAL ELECTRICAL STIMULATION CYCLING IN SPINAL CORD INJURY

J.W. van der Scheer^{1,2}, V L Goosey-Tolfrey¹, C A Leicht¹, C.H. Ho³

¹Loughborough University, LOUGHBOROUGH, United Kingdom; ²University of British Columbia, KELOWNA, Canada; ³University of Alberta,

EDMONTON, Canada

P47: EVERYDAY USE OF LOWER LIMB ORTHOTICS AND QUALITY OF LIFE IN SUBJECTS WITH NEUROMUSCULAR DISEASE

TK Kaib¹, SW Wendy², TK Kaib², MA Alimusaj², CW Weichold², SW Wolf², MS Schwarze²

, HEIDELBERG, Germany

²University Hospital, HEIDELBERG, Germany

P49: BIOMECHANICAL EFFECTS OF A CARBON FIBRE FOOT WITH A PRONOUNCED RANGE OF MOTION ON RAMPS

TK Kaib¹, JB Block², SW Wolf², TK Kaib², DH Heitzmann²

¹HEIDELBERG, Germany

²University Hospital, HEIDELBERG, Germany

P51: DERMATOGLYPHIC AND SOMATOTYPIC PROFILE OF THE BRAZILIAN PARALYMPIC FOOTBALL FIVE-A-SIDE NATIONAL TEAM

JFF Fernandes Filho¹, JIG Gorla², IBV Vieira³, DRC Calegari⁴, CDN Nogueira⁵, GLO Oliveira⁶, TAPO Oliveira⁶

¹Brazilian Parallimpica Academy, RIO DE JANEIRO, Brazil; ²Universidade Estadual de Campinas, CAMPINAS, Brazil; ³Comitê Paralímpico

Brasileiro, SÃO PAULO, Brazil; ⁴Universidade Estadual de Maringá, MARINGÁ, Brazil

⁵Universidade Castelo Branco, RIO DE JANEIRO, Brazil; ⁶Universidade Federal do Rio de Janeiro, RIO DE JANEIRO, Brazil

P53: SIMULATING THE MANUAL WHEELCHAIR ROTATIONAL AND TRANSLATIONAL BEHAVIOR DURING FREE MOVEMENT, FOLLOWING A ROTATIONAL IMPULSE

JB Bascou¹, CS Sauret², HS Hybois², FL Lavaste², HP Pillet²

¹Institution Nationale des Invalides, CRÉTEIL, France

²Institut de Biomécanique Humaine Georges Charpak, PARIS, France

P55: COMPUTATIONAL MODELING OF IMPAIRED MOVEMENTS AND RESTAURATION THERE-OF

HW Wagner, KB Boström

WWU Münster, MÜNSTER, Germany

P57: WE12BFIT! IMPROVING PHYSICAL FITNESS AND LIFESTYLE PHYSICAL ACTIVITY IN 7-12 YEAR OLD CHILDREN WITH DCD

P. Braaksma, M.M. Schoemaker, I. Stuive, R. Dekker, C.K. van der Sluis

UMCG, GRONINGEN, Netherlands

P59: KINEMATIC ANALYSIS OF EXPERIENCED AND INEXPERIENCED 0.5-POINT WHEELCHAIR RUGBY ATHLETES

Y.-T. Oh¹, B. Mason¹, V. Altmann², S. Briley¹, V. L. Vicky¹

¹The Peter Harrison Centre for Disability Sports, LOUGHBOROUGH, United Kingdom

²Sint Maartenskliniek, NIJMEGEN, Netherlands

P61: EXPERIENCED SEATING-RELATED PROBLEMS AND ASSOCIATION WITH PERSONAL, LESION AND WHEELCHAIR CHARACTERISTICS IN PARAPLEGIA AND TETRAPLEGIA

J.m. Valent¹, J. Nachtegaal¹, WXM Faber¹, C. Smit², E. Kaandorp¹, S. Pratt-Sutherland³, H. Houdijk¹, JJE Adriaansen⁴, S. De Groot⁴, MWM Post⁵

¹Heliomare, WIJK AAN ZEE, Netherlands; ²Tolbrug, DEN BOSCH, Nederland; ³Seating solutions LLC, ENNISCORNE, Ireland; ⁴Centre for Rehabilitation and Rheumatology, AMSTERDAM, Netherlands; ⁵Hoogstraat Rehabilitation, UTRECHT, Netherlands

P63: AUTOMATIZED, STANDARDIZED AND PATIENT-TAILORED PROGRESSIVE WALKING ADAPTABILITY TRAINING: A PROOF-OF-CONCEPT STUDY

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

¹Vrije Universiteit Amsterdam, AMSTERDAM, Nederland

²VU Medical Center, AMSTERDAM, Nederland

P65: METABOLIC COST OF DAILY ACTIVITIES IN PEOPLE WITH LOWER LIMB AMPUTATION - A STUDY PROTOCOL

E.R. Blaauw¹, L.H.V van der Woude¹, L. van Schaik², R. Dekker²

¹University of Groningen, GRONINGEN, Nederland

²University Medical Center Groningen, GRONINGEN, Nederland

P67: COLLABORATION BETWEEN PSYCHOMOTOR THERAPY AND HUMAN MOVEMENT SCIENCES; A LITERATURE REVIEW IN MENTAL HEALTH CONTEXT

C Boerhout¹, ML Becker², R Bouman¹

¹University Medical Center Groningen, GRONINGEN, Netherlands; ²University of Groningen, GRONINGEN, Netherlands

P69: DEVELOPMENT OF A RESTING ENERGY EXPENDITURE EQUATION IN INDIVIDUALS WITH CHRONIC SCI FOR AN APPLICATION

D.P. Hoevenaars¹, Y. Ma¹, H.L.D. Horemans², R. Memelink³, P.J.M. Weijs³, R.E. De Gouveia da Costa Cachucho⁴, M. Deutekom⁵, H.B. Bussmann², W. Kraaij⁴, S. De Groot⁶, T.W.J. Janssen¹

¹Vrije Universiteit, AMSTERDAM, Netherlands; ²Erasmus MC, ROTTERDAM, Netherlands; ³Amsterdam University of Applied Sciences, AMSTERDAM, Nederland; ⁴Leiden University, LEIDEN, Nederland; ⁵Inholland University of Applied Sciences, HAARLEM, Nederland; ⁶Amsterdam Rehabilitation Research Center, AMSTERDAM, Nederland

P71: EFFECT OF DIFFERENT HEEL ROCKER PROFILES ON LOWER-LIMB JOINT BIOMECHANICS AND PLANTAR PRESSURE

L van Kouwenhove¹, GJ Verkerke², K Postema², R Dekker², JM Hijmans²

¹University of Groningen, University Medical Center Groningen, GRONINGEN, Netherlands

²University of Groningen, University Medical Center Groningen, Department of Reh, GRONINGEN, Netherlands

P73: EFFECTS OF A PEDIASUIT ADAPTED PROTOCOL IN THE MOTOR FUNCTION OF CHILDREN WITH CEREBRAL PALSY

RSK Kos¹, SMVM Marino², LEOMR Robbi², ACJ Cliquet Jr¹

¹State University of Campinas, CAMPINAS, Brazil

²House of Paralytic Child of Campinas, CAMPINAS, Brazil

P75: THE USE OF AN INERTIAL MEASUREMENT UNIT TO ASSESS THE SHANK-TO-VERTICAL ANGLE IN HEALTHY INDIVIDUALS

L.A.F. de Jong¹, Y.L. Kerkum², J. Jansens¹, N.L.W. Keijsers¹

¹Sint Maartenskliniek, NIJMEGEN, Nederland

²OIM Orthopedie, ASSEN, Nederland

P77: PRACTICE-BASED SKILL ACQUISITION OF PUSHRIM-ACTIVATED POWER-ASSISTED WHEELCHAIR PROPULSION VERSUS REGULAR HANDRIM PROPULSION IN NOVICES

R de Klerk, RJK Vegter, LHV van der Woude

University Medical Centre Groningen, GRONINGEN, Netherlands

P79: GLOVE TYPES AND SPATIOTEMPORAL VARIABLES OF WHEELCHAIR RACER ACCORING PARALYMPIC SPORTS CLASSIFICATION IN 100M SPRINT.

H.R JUNG¹, K.K LEE²

¹Kookmin univ., INCHEON, South-Korea; ²Kookmin UNIV., SEOUL, South-Korea

P81: HANDCYCLING IN AN MRI: A NEW PLATFORM TO UNDERSTAND LOCAL METABOLIC CHANGES BECAUSE OF TRAINING

RJK Vegter, S Van den Brink, LHV Van der Woude, J.A.L Jeneson
University of Groningen, University Medical Center Groningen, GRONINGEN, Nederland

P83: CHANGES IN BODY COMPOSITION IN PEOPLE WITH RECENT SPINAL CORD INJURY DURING INPATIENT REHABILITATION

Y Ma¹, S De Groot², S Romviel², W Achterberg², L Van Orsouw², TW Janssen¹
¹Faculty of Behavioural and Movement Sciences, VU University, AMSTERDAM, Netherlands
²Amsterdam Rehabilitation Research Center | Reade, AMSTERDAM, Netherlands

P85 : STIMULATING PHYSICAL ACTIVITY IN HARD-TO-REACH PHYSICALLY DISABLED PEOPLE; SYSTEMATIC DEVELOPMENT OF A COMMUNITY-BASED INTERVENTION

L.A. Kroops, J.H.B. Geertzen, P.U. Dijkstra, R. Dekker
University Medical Center Groningen, GRONINGEN, Nederland

P87: MOVING TOWARDS AN EXERCISE & MOVEMENT-FRIENDLY ACADEMIC HOSPITAL: THE UMCG LIFESTYLE NAVIGATOR

R.A. De Roos¹, R. Dekker², M. Stevens², R.L. Diercks², G.J. Navis², H.G. Van Keeken², A.O. Boer², J.C.G. Van 't Klooster², L.H.V. Van der Woude², K.L. Sandys², N.O. Tuintjer²
GRONINGEN, Netherlands
²UMCG, GRONINGEN, Nederland

P89: TOWARDS STANDARDIZED PEAK AEROBIC WHEELCHAIR EXERCISE TESTING: A REVIEW OF PREVIOUSLY USED PROTOCOLS

SGA de Lig
University of Groningen, GRONINGEN, Netherlands

P91: HOW CAN WE ORGANIZE THE HANDBIKEBATTLE IN OTHER COUNTRIES FOCUSING ON CULTURE, ORGANIZATIONAL STRUCTURE, MARKETING?

B.K. Gunderson
OUDE MEER, Nederland

P93: FEASIBILITY OF VIGOROUS TRAINING INTENSITY WITH A RESISTANCE TRAINING PROGRAM FOR ADULTS WITH INTELLECTUAL DISABILITY

S Weterings, A Oppewal, T.I.M. Hilgenkamp
Erasmus MC University Medical Centre Rotterdam, ROTTERDAM, Nederland

P95: THE EFFECT OF ASSIST-AS-NEEDED SUPPORT ON ENERGY EXPENDITURE DURING ROBOTIC GAIT TRAINING OF STROKE PATIENTS

B.M. Fleerkotte¹, J.H. Buurke¹, E.H.F. van Asseldonk², J.S. Rietman¹
¹Roessingh Research and Development, ENSCHEDE, Nederland
²University of Twente, ENSCHEDE, Nederland