

Overview poster presentations part I

Presentation Thursday May 22

Topic 1: Physical activity: measurement & general issues

P-1-1 MONITORING MOBILITY RELATED ACTIVITIES IN OLDER PEOPLE; SYSTEMATIC REVIEW

de Bruin ED^{1,2}

¹ Institute of Human Movement Sciences and Sport, D-Biology, ETH Zurich, Switzerland, ² Department of Rheumatology and Institute of Physical Medicine, University Hospital Zurich, Zurich, Switzerland

P-1-2 MONITORING OF PHYSICAL ACTIVITY USING ACCELEROMETERS AND PEDOMETERS AND POSSIBILITY TO CHANGE PHYSICAL ACTIVITY BEHAVIOR USING INDIVIDUALIZED FEEDBACK

Sigmund E

Center for Kinanthropology Research, Palacky University, Olomouc, Czech Republic

P-1-3 DIURNAL MOTOR ACTIVITY EVALUATED BY WRIST AND BACK ACTIGRAPHY: A WITHIN SUBJECT COMPARISON OF RAW SIGNALS

Raymann RJEM

TNO Defence, Security and Safety, Soesterberg, the Netherlands

P-1-4 ASSESSMENT OF PHYSICAL ACTIVITY IN DAILY LIFE IN MUSCULOSKELETAL PAIN: A REVIEW OF THE LITERATURE

Verbunt JA^{1,2}

¹ Rehabilitation Foundation Limburg, Hoensbroek, ²Maastricht University, Maastricht, the Netherlands

P-1-5 ACTIVITY TYPE AS A DETERMINANT OF ACTIVITY LEVEL

Bonomi AG^{1,2}

Philips Research, Care&Health Applications, Eindhoven, the Netherlands, ²Maastricht University, Department of Human Biology, Maastricht, the Netherlands

P-1-6 POTENTIAL OF MOBILE MONITORING OF PHYSICAL ACTIVITY TO IMPROVE HUMAN HEALTH: RESULTS OF AN INTERNATIONAL EXPERT PANEL WORKSHOP

Daumer M^{1,2}

¹Sylvia Lawry Centre for Multiple Sclerosis Research, Munich, Germany, ²Trium Analysis Online GmbH, Munich, Germany

P-1-7 AMBULATORY MOVEMENT MONITOR REQUIREMENTS

McNames J^{1,2}

¹APDM, Inc., Portland, Oregon, USA, ²Biomedical Signal Processing Laboratory, Portland State University, Portland, Oregon, USA

P-1-8 WHAT DOES THE "LEFT" HAND TELL US?

Papastefanou G

Gesis Leibniz Institute for Social Science, Mannheim, Germany

P-1-9 INSTRUMENT RELIABILITY OF RT3 ACCELEROMETER AT DIFFERENT LEVELS OF PHYSICAL ACTIVITY IN CHILDREN AND ADOLESCENTS

Vanhelst J^{1,2}

¹EA 3925, IFR 114, IMPRT, Hôpital Jeanne de Flandre, et Université Lille 2 Droit et Santé, France, ²Laboratoire R.E.L.A.C.S, EA 4111, Université du Littoral Côte d'Opale, Dunkerque, France

P-1-10 A TOOL FOR GEOSPATIAL ANALYSIS OF PHYSICAL ACTIVITY: PHYSICAL ACTIVITY LOCATION MEASUREMENT SYSTEM (PALMS)

Patrick K

Department of Family and Preventive Medicine, University of California, San Diego, CA, USA

P-1-11 PHYSICAL ACTIVITY RECOGNITION IN CHILDREN BY TWO UNI-AXIAL ACCELEROMETERS

Ruch N

Swiss Federal Institute of Sport SFIS, Magglingen, Switzerland

P-1-12 TEST-RETEST RELIABILITY OF THREE DAY ACTIVITY MONITORING IN PARTICIPANTS WITH STROKE

Mudge S

Department of Surgery, University of Auckland, Auckland, New Zealand

P-1-13 TEST-RETEST RELIABILITY OF THE STEPWATCH ACTIVITY MONITOR IN HEALTHY PARTICIPANTS

Mudge S

Department of Surgery, University of Auckland, Auckland, New Zealand

P-1-14 RELATIONSHIP OF THE ACTICAL TO THE STEPWATCH ACTIVITY MONITOR IN HEALTHY PARTICIPANTS

Mudge S

Department of Surgery, University of Auckland, Auckland, New Zealand

P-1-15 MONITORING OF DAILY ACTIVITY LEVELS AND PROSTHETIC WEARING TIMES IN TRANS-TIBIAL AMPUTEES USING SUCTION SOCKETS

Tang KT

University of Strathclyde, Glasgow, UK

P-1-16 AN INVESTIGATION OF THE CONSTRUCT VALIDITY OF FREE-LIVING PHYSICAL ACTIVITY AS A MARKER OF FUNCTIONAL ABILITY IN PEOPLE WITH CHRONIC LOW BACK PAIN

Granat M

School of Health and Social Care, Glasgow Caledonian University, Glasgow, UK, G4 OBA

P-1-17 SLEEP SCORED WRIST AND BACK ACTIGRAPHY: A COMPARISON

Raymann RJEM

TNO Defence, Security and Safety, Soesterberg, the Netherlands

P-1-18 RECOGNITION OF MILITARY SPECIFIC ACTIVITY CLASSES USING HEARTRATE- AND ACCELERATION MONITORS

Wyss T

Swiss Federal Institute of Sports Magglingen, Switzerland

P-1-19 VALIDITY OF A BODY WORN SENSOR SYSTEM AS A MEASURE OF STEP COUNT DURING WALKING IN FRAIL OLDER ADULTS

Stene G^{1,2}

¹Dept. of Neuroscience, Norwegian University of Science and Technology, Trondheim Norway, ²Dept. of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway

P-1-21 DEVELOPMENT OF A LOCATION AND MOVEMENT MONITORING SYSTEM TO QUANTIFY PHYSICAL ACTIVITY

MacLellan G

School of Health and Social Care, Glasgow Caledonian University, Glasgow, UK

P-1-22 ACTIVITY RECOGNITION USING ELECTROOCULOGRAPHY: READING WHILE SITTING, STANDING AND WALKING

Ward JA

Embedded Interactive Systems, Computing Department, University of Lancaster, Lancaster, UK

P-1-23 EVALUATION OF A LABORATORY TO RECREATE OUTDOOR ENVIRONMENTS INDOORS

Childs CR

Accessibility Research Group, Department of Civil, Environmental and Geomatic Engineering, University College, London, UK

P-1-24 APPLICATION OF THE SPEED SENSOR ON PERCIVED DISTANCE FOR THE SIGHT AND HEARING HANDICAPS

Sato T

Lab.Human Factors, Jissen Women's University, Tokyo, Japan

P-1-25 FROM THE SENSORS TO FEATURES: WHAT OPTIMIZES THE RECOGNITION OF PHYSICAL ACTIVITY?

Rumo M

Physical Activity and Health Branch, Swiss Federal Institute of Sports, Magglingen, Switzerland

P-1-26 MULTI-SENSOR PLATFORM FOR ACTIVITY MEASUREMENTS

Diemer R

Institute for Realtime Computersystems, Technische Universität München, Munich, Germany

P-1-27 RECOGNITION OF DAILY LIFE ACTIVITIES - A SENSOR NETWORK PROSPECT

Sorel A

M2S Laboratory, University of Rennes 2 - ENS Cachan, Avenue Charles Tillon - 35044 Rennes, France

P-1-28 DETECTION OF GAIT AND POSTURES IN OLDER ADULTS AND PATIENTS WITH PARKINSON'S DISEASE: ACCURACY OF AN ACCELEROMETRY BASED METHOD

Dijkstra B

Center for Human Movement Sciences, University Medical Center Groningen, University of Groningen

P-1-29 GAIT & POSTURE DETECTION IN DAILY LIFE BASED ON ONE 3D ACCELEROMETER

Van Lummel RC

McRoberts, The Hague, the Netherlands

Topic 3: Gait and 3D kinematic analysis outside the lab

P-3-1

RELIABILITY OF AMBULATORY MONITORING TO EVALUATE GAIT CHARACTERISTICS OF DIABETIC PATIENTS

Allet L^{1,2}

¹University Hospital, Geneva, Switzerland, ²Department of Epidemiology University and Caphri research school, Maastricht, the Netherlands

P-3-2 REAL-TIME GAIT EVENT DETECTION USING A BIAxIAL ACCELEROMETER

Rodriguez-Uria J

Multisensor Systems Research Unit, Department of Electrical Engineering, University of Oviedo

P-3-3

THE VALIDITY AND FEASIBILITY OF THE TELEMETRY MONITORING SYSTEM FOR POSTURAL AND LOCOMOTION PATTERNS

Lee HK

Department of Biomedical Engineering; Yonsei University, Wonju, Gangwondo, Republic of Korea

P-3-4 THE DEVELOPMENT OF A CLINICAL GAIT ANALYSIS SYSTEM

O'Donovan K

Digital Health Group, Intel Corporation

P-3-5 RELATIONSHIP BETWEEN ACCELEROMETRIC SIGNALS FROM BODY-MOUNTED SENSORS AND CENTER OF PRESSURE FROM A FORCE PLATE DURING QUIET STANCE

Mancini M

Biomedical Engineering Unit, Department of Electronics, Computer Science & Systems, University of Bologna, Italy

P-3-6 VALIDATION OF AN AMBULATORY GAIT MONITOR IN PATIENTS WITH PARKINSON'S DISEASE

Speelman AD

Department of Neurology and Parkinson Center Nijmegen (ParC), the Netherlands

P-3-7 VALIDATION OF AN ACCELERATION BASED GAIT TEST TO FOLLOW UP TKA PATIENTS

Senden R^{1,2}

¹University Maastricht, Faculty of Health Medicine and life sciences, Maastricht, the Netherlands, ²Atrium Medical Center, Dept Orthopaedics & Traumatology, Heerlen, The Netherlands

P-3-8 GAIT FUNCTION OF TOTAL HIP ARTHROPLASTY PATIENTS: ANALYSIS OF PREFERRED SPEED WALKING ALONE IS NOT ENOUGH.

Van den Akker-Scheek I

Department of Orthopaedics, University Medical Center Groningen, University of Groningen, the Netherlands

P-3-9 RELIABILITY OF A BODY-FIXED SENSOR GAIT ANALYSIS PROTOCOL FOR EVALUATING GAIT FUNCTION IN PATIENTS WITH HIP OSTEOARTHRITIS

Reininga IHF

Department of Orthopaedics, University Medical Center Groningen, University of Groningen, The Netherlands

P-3-10 CENTER OF PRESSURE DYNAMICS IN PARKINSON'S DISEASE PATIENTS WITH FREEZING OF GAIT: FAILED POSTURAL ADJUSTMENTS?

Hausdorff JM^{1,2,3}

¹Movement Disorders Unit, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel ; ²Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; ³Harvard Medical School, Boston, MA, USA

P-3-11 LONG-RANGE CORRELATIONS IN GAIT DATA OF COPD PATIENTS

Annegarn J

Department of Human Movement Sciences, Faculty of Health Medicine and Life Sciences, Nutrition and Toxicology Research Institute Maastricht (NUTRIM), Maastricht University, Maastricht, The Netherlands

P-3-12 NORMAL GAIT ANALYSIS USING AN ORIGINAL ANALYZING STRAP

Nica A

Department of Physical and Rehabilitation Medicine, University of Medicine "Carol Davila" Bucharest, Romania

P-3-13 FEASIBILITY AND VALIDITY OF THE ACTIVITY MONITOR IN CHILDREN WITH CP

Horemans HLD

Department of Rehabilitation Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, the Netherlands

P-3-14 ESTIMATION OF TRAJECTORY OF HUMAN CENTER OF GRAVITY DURING GAIT USING A TRI-AXIAL ACCELEROMETER AND THREE GYRO SENSORS

Komoto K

Graduate School of Science and Engineering, Ritsumeikan University, Kusatsu, Japan

P-3-15 OUTDOOR GAIT ANALYSIS USING INERTIAL AND MAGNETIC SENSORS: PART 1 - PROTOCOL DESCRIPTION

Garofalo P

DEIS, University of Bologna, Italy

P-3-16 SENSING DYNAMIC INTERACTION WITH THE ENVIRONMENT

Veltink PH

University of Twente, Institute for BioMedical Technology (BMTI), Enschede, the Netherlands

P-3-17 INERTIAL-BASED APPROACH FOR 3D EVALUATION OF ACL-DEFICIENT KNEE JOINT DURING GAIT

Aminian K

Ecole Polytechnique Fédérale de Lausanne (EPFL-LMAM), Lausanne, Switzerland

P-3-18 ANTICIPATORY SWING FOOT KINEMATICS DURING BIPEDAL LOCOMOTION

Block EW

Department of Clinical Neurosciences and Hotchkiss Brain Institute, University of Calgary, Canada

Overview poster presentations part II

Presentation Friday May 23

Topic 2: Medical & public health applications I

P-2-1 THE METABOLIC COST OF TWO AMPUTEES WALKING OUTDOOR WITH THE 'POWER KNEE' PROSTHESIS

Cutti AG

INAIL Prosthesis Centre, Research Area, Vigorso di Budrio (Bo), Italy

P-2-2 PHYSICAL ACTIVITY IS RELATED TO HEALTH-RELATED QUALITY OF LIFE IN ADOLESCENTS AND YOUNG ADULTS WITH SPINA BIFIDA

Buffart LM

Department of Rehabilitation Medicine, Erasmus MC, University medical center, Rotterdam, the Netherlands

P-2-3 AMBULATORY ASSESSMENT OF THE MOTOR STATE IN PARKINSON'S DISEASE IN REAL DAILY LIFE

Keijsers NLW^{1,2}

¹Sint-Maartenskliniek, Research Development & Education, Nijmegen, The Netherlands, ²Department of Biophysics, Institute for Neuroscience, Radboud University, Nijmegen, the Netherlands

P-2-4 ACCELEROMETRY-BASED ACTIVITY MONITORING FOR UPPER LIMB PROSTHESIS EVALUATION

Kenney LPJ

Centre for Rehabilitation and Human Performance Research, University of Salford, Salford, UK

P-2-5 UPPER-LIMB ACTIVITY PROFILE OF STROKE PATIENTS

Vega-Gonzalez A

Department of Physiology, Faculty of Medicine, National Autonomous University of Mexico, Mexico City 04510, MEXICO

P-2-6 MULTI-DAY PHYSICAL ACTIVITY MONITORING IN PEOPLE WITH CEREBRAL PALSY

Tang KT

University of Strathclyde, Glasgow, UK

P-2-7 OBJECTIVE ASSESSMENT OF MOBILITY OF THE SPINAL CORD INJURED IN A FREE-LIVING ENVIRONMENT

Dall PM

School of Health & Social Care, Glasgow Caledonian University, Glasgow, UK

P-2-8 MEASURING PHYSICAL ACTIVITY IN AMBULATORY CHILDREN WITH SPINA BIFIDA: FROM DIARY TO PHYSICAL ACTIVITY MONITOR

de Groot JF

¹Department of Pediatric Physical Therapy and Exercise Physiology, University Medical Center Utrecht, the Netherlands. ²Research Group Lifestyle and Health, University of Applied Sciences Utrecht, the Netherlands

P-2-9 FREQUENCY OF THE SIT TO STAND TASK IN FREE LIVING ADULTS

Dall PM

School of Health & Social Care, Glasgow Caledonian University, Glasgow, UK

P-2-10 PHYSICAL ACTIVITY PATTERNS OF PATIENTS AFTER ROTATIONPLASTY DUE TO MALIGNANT BONE TUMORS

Müller C

Motion Analysis Lab, Orthopaedic Department, University Hospital Muenster, Germany

P-2-11 ACTIVITY LEVEL IN PATIENTS WITH LUMBAR SPINAL STENOSIS BEFORE AND AFTER DECOMPRESSIVE SURGERY

Winter C

Department of Orthopedics, University Hospital of Muenster, Germany

P-2-12 DAILY PHYSICAL ACTIVITIES OF PATIENTS WITH CHRONIC LOW BACK PAIN, ASSESSED WITH ACCELEROMETRY

van Weering MGH

Roessingh Research and Development, Enschede, the Netherlands

P-2-13 HOW AN AMBULATORY MONITORING SYSTEM MIGHT DESCRIBE FRAILTY IN ELDERLY PERSONS

Martin E

Service of Geriatric Medicine, CHUV & CUTR Sylvana, 1066 Epalinges, Switzerland

P-2-14 EVERYDAY PHYSICAL ACTIVITY IN ADULTS WITH BILATERAL SPASTIC CEREBRAL PALSY

van den Berg-Emons HJG

Department of Rehabilitation Medicine, Erasmus University Medical Center, Rotterdam, The Netherlands

P-2-15 EFFECT OF REHABILITATION ON DAILY PHYSICAL ACTIVITY, PHYSICAL FITNESS AND FATIGUE IN LIVER TRANSPLANT RECIPIENTS

van Ginneken BTJ

Department of Rehabilitation Medicine, Erasmus University Medical Center, Rotterdam, the Netherlands

P-2-16 EFFECT OF BOTULINUM TOXIN TREATMENT ON ACTIVITY LEVEL OF PATIENTS WITH SPASTIC HEMIPARESIS AFTER STROKE

Jelsma NG

Heliomare Rehabilitation Centre, Wijk aan Zee, The Netherlands

P-2-18 PILOT STUDY- PHYSIOLOGICAL DATA RECORDED REMOTELY FROM INDIVIDUALS WITH SPINAL CORD INJURY (SCI) DURING NORMAL DAILY ACTIVITIES

Nunn A^{1,2}

¹Victorian Spinal Cord Service, Austin Health, Heidelberg, Vic., Australia, ²Monash University Centre for Biomedical Engineering, Clayton, Vic., Australia

P-2-19 ORTHOPAEDIC OUTCOME ASSESSMENT WITH ACCELEROMETER ASSESSED STAIR CLIMBING

Grimm G

AHORSE Foundation, Atrium Medical Center Orthopaedic Research & Education, Heerlen, the Netherlands

P-2-20 EFFECT OF C-LEG ON LOCOMOTOR CAPACITY AND PERFORMANCE IN TRANSFEMORAL AMPUTEE

Paysant J

Institut Régional de médecine physique et de Réadaptation, Nancy, France

P-2-21 THE ASSOCIATIONS BETWEEN FUNCTION, CAPACITY AND PERFORMANCE OF THE UPPER-LIMBS FOLLOWING STROKE

Michielsen ME

Department of Rehabilitation Medicine, Erasmus Medical Center, Rotterdam, the Netherlands

Topic 4: Medical & public health applications II

P-4-1 THE HABITUAL PHYSICAL ACTIVITY OF WARD-BASED AND DAY-HOSPITAL ELDERLY PATIENTS

Grant PM

School of Health & Social Care, Glasgow Caledonian University, Glasgow, UK

P-4-2 MONITORING OF THE BODY CORE TEMPERATURE WHILE DOING SPORT

Kreuzer J

Buschmann Labor- und Medizintechnik, Munich, Germany

P-4-3 PHYSICAL ACTIVITY PATTERNS IN NORMAL WEIGHT AND OBESE ADULTS USING ACTIVPAL PHYSICAL ACTIVITY MONITOR

Tully MA

Health and Rehabilitation Sciences Research Institute, University of Ulster, Northern Ireland

P-4-4 THE ASSOCIATION BETWEEN SKIN TEMPERATURES AND CARDIAC AUTONOMIC RESPONSE IN YOUNG HEALTHY SUBJECTS

Li Y

iDAPT Technology R&D Team, Toronto Rehabilitation Institute, Toronto, Canada

P-4-5 PHYSICAL ACTIVITY MONITORING IN AFRICAN SUB-SAHARAN RURAL AREAS

Aminian K

Laboratory of Movement Analysis and Measurement, Ecole Polytechnique Federale de Lausanne, Switzerland

P-4-6 BODY COMPOSITION IS ASSOCIATED WITH HABITUAL PHYSICAL ACTIVITY IN DAILY LIFE AS MEASURED USING A TRI-AXIAL ACCELEROMETER

den Hoed M

Department of Human Biology, Maastricht University, Maastricht, the Netherlands

P-4-7 MARKERS FOR MITOCHONDRIAL DENSITY AND FUNCTION CORRELATE POSITIVELY WITH HABITUAL PHYSICAL ACTIVITY IN DAILY LIFE

den Hoed M

Department of Human Biology, Maastricht University, Maastricht, The Netherlands

P-4-8 DIFFERENCES IN THE DYNAMICS OF TRUNK ANGULAR VELOCITY DURING DAILY LIFE WALKING AS A MARKER OF PHYSICAL FRAILTY

Aminian K

Laboratory of Movement Analysis and Measurement, Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland

P-4-9 MONITORING OF PHYSICAL ACTIVITY AND AUTONOMOUS NERVOUS SYSTEM FUNCTIONS IN PERSONS WITH MUSCULOSKELETAL DISORDERS

Lyskov E

University of Gevle, Gevle, Sweden

Topic 5: Balance and falls

P-5-1 IS TURNING DURING WALKING AN AUTOMATED MOTOR TASK, OR IS IT A COMPLEX COGNITIVE ACTION?

Hausdorff JM^{1,3}

¹Movement Disorders Unit & Parkinson Center, Department of Neurology, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel, ²Department of Physical Therapy, Sackler Faculty of Medicine, Tel-Aviv, Israel, ³Division on Aging, Harvard Medical School, Boston, USA

P-5-2 AMBULATORY MONITORING OF PLANTAR PRESSURE FOR DETECTING DIFFICULTY OF WALKING ON ICE

Dutta T^{1,2}

¹University of Toronto, Toronto, Canada, ²Toronto Rehabilitation Institute, Toronto, Canada

P-5-3 WEARABLE INERTIAL SENSORS DETECT ANTICIPATORY POSTURAL ADJUSTMENTS PRIOR TO STEP INITIATION IN EARLY PARKINSON'S DISEASE

Mancini M^{1,2}

¹Biomedical Engineering Unit, Department of Electronics, Computer Science & Systems, University of Bologna, Italy, ²Neurological Sciences Institute, Oregon Health & Science University, Beaverton, OR, USA

P-5-4 WIRELESS ACCELEROMETRY FOR MOTOR CONTROL QUANTIFICATION

Giordano A

Bioengineering Service, 'Salvatore Maugeri' Foundation, Clinica del Lavoro e della Riabilitazione, IRCCS, Veruno, Italy

P-5-5 BALANCE SKILL STATUS OF FOUR TO SIX YEAR OLD PRE-SCHOOL CHILDREN

Cools W

Department of movement education and sport training, Faculty of Physical Education and Physiotherapy (LK/BETR) Vrije Universiteit Brussel, Belgium

P-5-7 FOOT-WEAR DEPEND ACCELERATION MEASUREMENTS OF A FALL PREVENTION SYSTEM BASED ON A WEARABLE SENSOR

Endo H

Information Networking Lab, Graduate School of Engineering, Seikei University, Musashino, Tokyo, Japan

P-5-8 CLINICAL EVALUATION OF THE VIBROTACTILE LABYRINTHINE SUBSTITUTION SYSTEM (VLS) FOR PATIENTS WITH SEVERE VESTIBULAR FUNCTION LOSS

Janssen MJA^{1,7,8}

¹Department of Biomedical Engineering, University Hospital Maastricht, the Netherlands,

⁷Department of ENT, Division of Balance Disorders, University Hospital Maastricht, the Netherlands,

⁸School for Mental Health and Neuroscience, University Maastricht, the Netherlands

P-5-9 THE DISCRIMINATING POWER OF SWAY PARAMETERS IN STANCE TASKS

Janssen MJA^{1,2,3}

¹Department of Biomedical Engineering, University Hospital Maastricht, the Netherlands,

²Department of ENT, Division of Balance Disorders, University Hospital Maastricht, the Netherlands,

³School for Mental Health and Neuroscience, University Maastricht, the Netherlands

Topic 6: Ergonomics and Occupational Health

P-6-1 MOUSE AND KEYBOARD INTERACTIONS IN COMPUTER BEHAVIOR

Slijper HP

Department of Neuroscience, Erasmus MC, Rotterdam, the Netherlands

P-6-2 PIMEX, AN APPLICATION WHICH MAKES PHYSICAL LOAD VISIBLE

Beurskens-Comuth PAWV

Arbo Unie, Business Unit South-east, Venlo, the Netherlands

Topic 7: Data processing & analysis

P-7-1 A MODEL-BASED APPROACH FOR AMBULATORY MEASUREMENT OF MOTOR SYMPTOMS IN PARKINSON'S DISEASE

Le Cavorzin P^{1,2}

¹ University Research Unit "Basal Ganglia and Behaviour" (URU 425), University of Rennes 1, Rennes, France, ² Rennes-Beaulieu Rehabilitation Institute, Rennes, France

P-7-2 A METHOD FOR PERSONAL POSITIONING AND ACTIVITY MONITORING IN 3D INDOOR UTILIZING WEARABLE SENSORS AND MAP KNOWLEDGE

Ohtaki Y

¹ Graduate School of Medicine and Engineering, University of Yamanashi, Kofu, Japan

P-7-3 AUTOMATIC ACTIVITY RECOGNITION FOR TECHNOLOGY-SUPPORTED STROKE REHABILITATION

Winter S

Philips Research Europe, 52066 Aachen, Germany

Topic 8: Energy expenditure

P-8-1 ACCELEROMETER BASED DETECTION OF PHYSICAL ACTIVITY IN CHILDREN AND ADULTS

Terwee CB

EMGO Institute, VU University Medical Center, Amsterdam, the Netherlands

P-8-2 DOES ACCELEROMETER PLACEMENT AFFECT METABOLIC ENERGY EXPENDITURE ESTIMATION IN NORMAL WEIGHT AND OBESE SUBJECTS?

Kenney LPJ

Centre for Rehabilitation and Human Performance Research, University of Salford, Salford, UK

P-8-3 COMPARISON OF COMBINED PHYSICAL ACTIVITY MEASUREMENT DEVICES: A BRIEF REVIEW

Moy KL

University of California, San Diego, Department of Family and Preventive Medicine, San Diego, USA

P-8-4 PHYSIOLOGIC RELEVANCE OF OPTIMIZED BRANCHED ALGORITHM ANALYSES IN ESTIMATING ENERGY EXPENDITURE

Browning RC

Center for Human Nutrition, University of Colorado, Denver, USA

P-8-5 ALTERNATIVE APPROACH FOR PRESENTING DATA OF ENERGY COST OF WALKING

Brehm MA^{1,2}

¹VU University Medical Center, Amsterdam, The Netherlands, ²MOVE Institute for Human Movement Research, Amsterdam, The Netherlands

Topic 9: Remote monitoring

P-9-1 COMPARISON OF SENSOR CONFIGURATION IN TELE-HEALTH APPLICATIONS ON CLASSIFICATION OF BEHAVIOR

Keijsers NLW

St. Maartenskliniek, Research, Development & Education, Nijmegen, the Netherlands

Topic 10: Psychology & miscellaneous

P-10-1

WRIST-ACTIGRAPHY TO ASSESS DISTURBED REST-ACTIVITY PATTERNS IN DELIRIUM AFTER CARDIAC SURGERY

Tulen JHM

Department of Psychiatry, Erasmus MC, Rotterdam, the Netherlands