**ICAMPAM 2015 Detailed Program**

*Please note that the program is subject to change*

**Tuesday June 9th:**

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<td>12:00 – 20:00</td>
<td>Registration Open:</td>
<td>Reception Area (Jean Monnet Theatre)</td>
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<td>14:00 – 15:30</td>
<td>Pre-Conference Workshops:</td>
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<td>14:00 – 15:30</td>
<td>Workshop Session 1:</td>
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<td>14:00 – 15:30</td>
<td>Location: Jonathan Swift Lecture Theatre (B1-023)</td>
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<td><strong>WS-1A:</strong> Body Worn Monitors: Sensor Configuration and Understanding the Underlying Hardware</td>
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<td><strong>Presenter:</strong> Cas Ladha, Computing Science, Newcastle University, Newcastle, UK.</td>
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<td><strong>Introducer:</strong> Ian Kenny, University of Limerick, Limerick, Ireland.</td>
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<td>15:30-15:45</td>
<td>Coffee Break:</td>
<td>Charles Parsons Lecture Theatre (C1-063)</td>
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<td>15:45 – 17:15</td>
<td>Workshop Session 2:</td>
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<td><strong>Location:</strong> Jonathan Swift Lecture Theatre (B1-023)</td>
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**WS-2A:** *From the Lab to the Community: Using Body Worn Monitors to Quantify Micro and Macro Levels of Gait*

**Presenter:** Alan Godfrey, Institute of Neuroscience, Clinical Ageing Research Unit, Newcastle University, Newcastle, UK.

**Introducer:** Kieran Dowd, University of Limerick, Limerick, Ireland.

**Location:** Charles Parsons Lecture Theatre (C1-063)

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**WS-2B:** *Grant Writing Workshop*

**Presenter:** Lisa Chasan-Taber, University of Massachusetts, Amherst, Massachusetts, USA.

**Introducer:** Alan Donnelly, University of Limerick, Limerick, Ireland.

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**17:15 – 17:45**

**Coffee Break:**

**Location:** Charles Parsons Lecture Theatre (C1-063)

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**17:45 – 19:15**

**Parallel Symposia:**

**Location:** Jonathan Swift Lecture Theatre (B1-023)

**S-1:** *Trialing Novel Technology to Understand the Who, What, When, Where, and Why of Physical Activity and Sedentary Behaviour*

**Host:** Dale Esliger, Loughborough University, Leicestershire, UK.

**Participants:** Paul Sanderson, Loughborough University, UK.
Adam Loveday, Loughborough University, UK.

**Introducer:** Rhoda Sohun, University of Limerick, Limerick, Ireland.

**Location:** Charles Parsons Lecture Theatre (C1-063)

**S-2:** *A Holistic Approach in Measuring Occupational Physical Activity: Challenges and Potentials*

**Host:** Maria Hagströmer, Karolinska Institutet, Stockholm, Sweden.

**Participants:** Lydia Kwak, Karolinska Institutet, Sweden.
David Hallman, University of Gävle, Sweden.
Wim Grooten, Karolinska Institutet, Sweden.
Patrick Bergman, Linné University, Sweden.

**Introducer:** Fiona Ling, University of Limerick, Limerick, Ireland.

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**20:00 – 22:00 Opening Reception:**

**Location:** Pavillion Restaurant
Wednesday 10th June

7:00 – 12:00  
Registration Open:  
Location: Reception Area (Jean Monnet Theatre)

08:00 – 08:15  
Official Welcome:  
Location: Jean Monnet Theatre (DG-016)  
Host: Alan Donnelly, Conference Chair, University of Limerick, Limerick, Ireland.

08:15 – 09:15  
Opening Keynote:  
Location: Jean Monnet Theatre (DG-016)  
KS-1: Ulf Ekelund, Department of Sports Medicine, Norwegian School of Sport Sciences, Oslo, Norway.  
Title: Physical Activity, Sedentary Time and Cardio-metabolic Health in Youth: Does the Measurement of the Exposure Influence the Results?  
Chair: Patty Freedson, University of Massachusetts, Amherst, Massachusetts, USA.

09:15 – 10:15  
Invited Speakers:  
Location: Jean Monnet Theatre (DG-016)  
IS-1: Robert Motl, Division of Neuroscience, University of Illinois, USA.  
Title: Accelerometry in Multiple Sclerosis: Past, Present, and Future Applications  
IS-2: Wiebren Zijlstra, Institute of Movement and Sport Gerontology, German Sport University, Cologne, Germany  
Title: Why Tracking Older Persons’ Mobility Patterns is Relevant  
Chair: Susan Coote, University of Limerick, Limerick, Ireland.

Oral Session 1: Physical Activity: Measurement & General Issues 1  
Location: Jonathan Swift Lecture Theatre (B1-023)
Chair: Scott Crouter, University of Tennessee, Knoxville, Tennessee, USA.

09:15 – 09:30  
01.1 Combining global positioning systems and accelerometry to identify physical activity “hotspots” in adolescents residing in downtown Vancouver  
Christine Voss¹, Nolan Lee¹, Vivian Chung¹, Heather McKay¹, Meghan Winters²  
¹University of British Columbia, Vancouver, British Columbia, Canada, ²Simon Fraser University, Vancouver, British Columbia, Canada.

09:30 – 09:45  
01.2 Can do vs actually does: investigating the association between sensor-based functional measures and long-term physical activity monitoring  
Sabato Mellone¹, Marco Colpo², Stefania Bandinelli², Lorenzo Chiari¹  
¹Department of Electrical, Electronic and Information Engineering, University of Bologna, Bologna, Italy, ²Azienda Sanitaria Firenze, Florence, Italy.

09:45 – 10:00  
01.3 Classification of cycling as a subcategory of locomotion with an accelerometer on the lower back  
Siete C. Frouws¹, Rob van Lummel¹, Jaap van Dieën²  
¹McRoberts, The Hague, Netherlands, ²VU University Amsterdam, Amsterdam, Netherlands.

10:00 – 10:15  
01.4 Reliability of accelerometer-determined moderate-to-vigorous physical activity in children: A 12 country study  
Tiago Barreira¹, John Schuna Jr², Jean-Philippe Chaput³, Timothy Church⁴, Mikael Fogelholm⁵, Gang Hu⁶, Rebecca Kuriyan⁶, Estelle Lambert⁷, Carol Mahé⁸, Jose Maia⁹, Victor Matsudo¹⁰, Timothy Olds⁸, Vincent Onywera¹¹, Anura Kurpad¹², Martyn Standage¹³, Mark Tremblay¹⁴, Pei Zhao¹⁴, Peter Katzmarzyk⁴  
¹Syracuse University, Syracuse, New York, USA, ²Oregon State University, Oregon, USA, ³Children’s Hospital of Eastern Ontario Research Institute, Ottawa, Ontario, Canada, ⁴Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA, ⁵University of Helsinki, Helsinki, Finland, ⁶St. Johns Research Institute, Bengaluru, Karnataka, India, ⁷University of Cape Town, Cape Town, South Africa, ⁸University of South Australia, Adelaide, South Australia, Australia, ⁹Faculdade de Desporto, University of Porto, Porto, Portugal, ¹⁰Centro de Estudos do Laboratório de Aptidão Física de São Caetano do Sul (CELAFISCS), Sao Paulo, Brazil, ¹¹Kenyatta University, Nairobi, Kenya, ¹²Universidad de los Andes, Bogotá, Colombia, ¹³University of Bath, Bath, North East Somerset, UK, ¹⁴Tianjin Women’s and Children’s Health Center, Heping, Tianjin, China.

Oral Session 2: Sedentary Behaviours: Measurement & General Issues 1

Location: Charles Parsons Lecture Theatre (C1-063)

Chair: Jo Salmon, Deakin University, Melbourne, Victoria, Australia.

09:15 – 09:30  
02.1 Empirically derived cut-points for sedentary behaviour for weekdays and weekends: are we sitting differently?  
Alexandra Clarke-Cornwell¹, Tracey Farragher², Penny Cook¹, Lindsey Dugdill¹, Malcolm Granat¹  
¹Syracuse University, Syracuse, New York, USA, ²Oregon State University, Oregon, USA.
09:30 – 09:45

02.2 MVPA, and not sedentary time, is associated with total and regional adiposity in a sample of UK adults
Deirdre Harrington¹, Charlotte Edwardson¹, Joe Henson¹, Kamlesh Khunti¹, Thomas Yates², Melanie Davies¹
Leicester Diabetes Centre, University of Leicester, Leicester, UK, ²NIHR Leicester-Loughborough Diet, Lifestyle and Physical Activity Biomedical Research Unit, Leicester General Hospital, Leicester, UK.

09:45 – 10:00

02.3 Sedentary behavior: different types of operationalization influences outcomes
Johannes Bussmann¹, Malou Fanchamps¹, Rita van den Berg-Emons¹
¹Erasmus MC University Medical Center, Rotterdam, Netherlands.

10:00 – 10:15

02.4 Influence of season and meteorological factors on objectively measured physical activity and sedentary behaviour patterns among older UK men
Claudio Sartini¹, Richard Morris³, S Goya Wannamethee¹, Steve Iliffe³, Sarah Ash¹, Lucy Lennon³, Peter Whincup⁴, Barbara Jefferis³
¹University College London Medical School, Hampstead Campus, London, UK, ³University of Bristol, Bristol, London, ⁴St George’s University, London, UK.

10:15 – 10:30

Coffee Break:

Location: Main Exhibition Hall (EG0-10)

10:30 – 11:45

Poster Session 1:

Location: Main Exhibition Hall (EG0-10)

11:45 – 13:15

Single Track Symposium:

Location: Jonathan Swift Lecture Theatre (B1-023)

S-3: The Impact of Accelerometer Wear Location in Studies of Older Adults

Host: Charles Matthews, National Cancer Institute, Maryland, USA.

Participants: Tamara Harris, National Institute on Aging, USA.
Nancy Glynn, University of Pittsburgh, USA.
Annemarie Koster, Maastricht University, Netherlands.
Paolo Caserotti, University of Southern Denmark, Denmark.
Jacek Urbanek, Johns Hopkins University, USA.
Jaroslaw Harezlak, Indiana University, USA.
Eric Shiroma, National Institute on Aging, USA.
13:15 – 14:30

**Invited Speakers:**

**Location:** Jean Monnet Theatre (DG-016)

**IS-3:** Jo Salmon and Nicky Ridgers, School of Exercise and Nutrition Sciences, Deakin University, Melbourne, Victoria, Australia.

*Title:* Using Objective Monitoring to Examine Patterns and Changes in Children's Sedentary Behaviour

**IS-4:** Stewart Trost, School of Exercise and Nutrition Sciences, Queensland University of Technology, Australia.

*Title:* Predictive Analytics for Human Movement Behaviour: Lack of Innovation or Diffusion Failure?

**Chair:** Neville Owen, Baker IDI Heart & Diabetes Institute, Melbourne, Victoria, Australia.

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**Oral Session 3: Measuring and Optimising Physical Behaviours in Clinical Populations 1**

**Location:** Jonathan Swift Lecture Theatre (B1-023)

**Chair:** Robert Motl, University of Illinois, Illinois, USA.

14:30 – 14:45

03.1 Comparing physical activity levels based on self-report and accelerometry in those with and those without knee joint pathology

Sean Hurley¹, Sarah Kozey Keadle², William Stanish¹, Cheryl Hubley-Kozey¹

¹Dalhousie University, Halifax, Nova Scotia, Canada, ²National Cancer Institute, Maryland, USA.

14:45 – 15:00

0.3.2 Older people who feel fatigue have restricted ability to accumulate physical activity

Thorlene Egerton¹, Dorthe Stensvold¹, Ulrik Wisløff¹, Jorunn Helbostad¹, Sebastien Chastin²

¹Norwegian University of Science and Technology, Trondheim, Sør Trondelag, Norway, ²Glasgow Caledonian University, Glasgow, Scotland, UK.
15:00 – 15:15 03.3 The detection and isolation of tremor in people with multiple sclerosis (MS) using a wrist worn sensor
Stefan Teufl¹, Jenny Preston¹, Frederike van Wijck¹, Ben Stansfield¹
¹Glasgow Caledonian University, Glasgow, Scotland, UK.

15:15 – 15:30 03.4 A behavior intervention focusing on an active lifestyle is effective in persons with recent SCI: a randomized controlled trial
Carla Nooijen¹, Henk Stam¹, Michael Bergen², Rita van den Berg-Emons¹, Act-Active Research group¹
¹Erasmus MC University Medical Center, Rotterdam, Netherlands, ²Rijndam Rehabilitation Institute, Rotterdam, Netherlands.

15:30 – 15:45 03.5 The effects of activity and glucose on fatigue in type 2 diabetes: Elucidating relationships by time aggregate and gender
Cynthia Fritschi¹, Chang Park¹, Laurie Quinn¹
¹University of Illinois at Chicago, Chicago, Illinois, USA.

15:45 – 16:00 03.6 Objective measures of physical performance normalize following surgery for lumbar spinal stenosis
Matthew P Buman¹, Matthew Smuck², Ming-Chih Kao², Christy Tomkins-Lane², Agnes Ma², William Haskell²
¹Arizona State University, Phoenix, Arizona, USA, ²Stanford University, Stanford, California, USA.

Oral Session 4: Validation and Calibration

Location: Charles Parsons Lecture Theatre (C1-063)

Chair: Greg Welk, Iowa State University, Iowa, USA.

14:30 – 14:45 04.1 Stride-to-stride gait variability in daily life measured using accelerometers attached to the wrist
Benedikt Fasel¹, Kamiar Aminian¹
¹Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.

14:45 – 15:00 04.2 Agreement between Sensewear Armband Mini and wrist worn GT3X+ Monitors in Youth: Emphasis on nonwear time classification
Pedro Saint-Maurice¹, Youngwon Kim¹, Gregory Welk¹
¹Iowa State University, Ames, Iowa, USA.

15:00 – 15:15 04.3 Accuracy of a low-cost commercially available GPS data logger/receiver to estimate the slope during outdoor walking
Pierre-Yves de Müllenheim, Ségolène Chaudru, Marie Gernigon, Guillaume Mahé, Sandrine Bickert, Jacques Prioux, Bénédicte Noury-Desvaux, Alexis Le Faucheur
Laboratory of Sport, Health and Movement, University of Rennes 2, Rennes, France.
04.4 Assessing the impact of environmental conditions on GPS accuracy during human walking
Alexis Le Faucheur¹, Ségolène Chaudru², Pierre-Yves de Müllenheim³, Guillaume Mahé², Bénédicte Noury-Desvaux⁴
¹Ecole normale supérieure de Rennes, ²Centre d'investigation clinique (CIC, INSERM 1414), ³Laboratoire Mouvement, Sport, Santé (M2S), ⁴Institut de Formation en Education Physique et en Sport d'Angers.

04.5 Validation of an automated algorithm to identify waking and sleeping time in 24 hour accelerometry data
Julianne Van Der Berg¹, Paul Willems¹, Jeroen van der Velde¹, Hans Savelberg¹, Nicolaas Schaper¹, Miranda Schram¹, Simone Sep¹, Pieter Dagnelie¹, Hans Bosma¹, Coen Stehouwer¹, Annemarie Koster¹
¹Maastricht University, Maastricht, Limburg, Netherlands.

04.6 Utility of sedentary behaviour questionnaires in older men; comparisons with accelerometer data
Barbara Jefferis¹, Claudio Sartini¹, Sarah Ash¹, Lucy Lennon¹, S Wannamethee¹, Peter Whincup²
¹University College London Department of Primary Care & Population Health, London, UK, ²St George's, University of London, London, UK.

16:00 – 16:15
Coffee Break:
Location: Main Exhibition Hall (EG0-10)

16:15 – 17:30
Poster Session 2:
Location: Main Exhibition Hall (EG0-10)

17:30 – 18:30
Keynote Speaker:
Location: Jean Monnet Theatre (DG-016)

Title: Advances in Technology and Algorithms for Activity Monitoring
Chair: Malcolm Granat, University of Salford, Manchester, UK.

18:30 – 19:15
General Assembly:
Location: Jean Monnet Theatre (DG-016)

Hosts: Johannes Bussmann, Erasmus Medical Centre, Rotterdam, Netherlands. Malcolm Granat, University of Salford, Manchester, England, UK. Patty Freedson, University of Massachusetts, Amherst, Massachusetts, USA. David Bassett Jr., University of Tennessee, Knoxville, Tennessee, USA. Genevieve Healy, University of Queensland, Queensland, Australia.

Introducer: Alan Donnelly, University of Limerick, Limerick, Ireland.
Thursday 11\textsuperscript{th} June:

7:00 – 12:00

**Registration Open**

Location: Reception Area (Jean Monnet Theatre)

08:00 – 09:00

**Invited Speakers**

Location: Jean Monnet Theatre (DG-016)

IS-5: Carol Torgan, Kinetics Consulting, Bethesda, Maryland, USA.

*Title:* *The Future of Activity Monitoring: Innovating Beyond Steps, Sleep, and Speed.*

IS-6: Katrien Wijndaele, MRC Epidemiology Unit, Cambridge, UK.

*Title:* *Sedentary Time Characterisation: How does it Impact on Health Associations?*

Chair: Alan Donnelly, University of Limerick, Limerick, Ireland.

Oral Session 5: Sleep

Location: Jonathan Swift Lecture Theatre (B1-023)

Chair: Rebecca Spencer, University of Massachusetts, Amherst, Massachusetts, USA.

08:00 – 08:15

05.1 Does the composition of the day matter for health? A compositional data analysis paradigm for physical activity, sedentary behaviour and sleep research

Sebastien F Chastin\textsuperscript{1}, Javier Palarea-Albaladejo\textsuperscript{2}

\textsuperscript{1}Glasgow Caledonian University, Glasgow, Scotland, UK, \textsuperscript{2}Biomathematics and Statistics Scotland, Edinburgh, Scotland, UK.

08:15 – 08:30

05.2 The stability of actigraphic measures of sleep from 3 to 7 years of age

Rachael Taylor\textsuperscript{1}, Sheila Williams\textsuperscript{1}, Victoria Farmer\textsuperscript{1}, Barry Taylor\textsuperscript{1}

\textsuperscript{1}University of Otago, North Dunedin, Dunedin, New Zealand.

08:30 – 08:45

05.3 Comparing an automated accelerometer algorithm against expert visual detection of children’s overnight sleep

Kim Meredith-Jones\textsuperscript{1}, Sheila Williams\textsuperscript{1}, Barbara Galland\textsuperscript{1}, Gavin Kennedy\textsuperscript{1}, Rachael Taylor\textsuperscript{1}

\textsuperscript{1}University of Otago, North Dunedin, Dunedin, New Zealand.

08:45 – 09:00

05.4 Activity Monitoring in The Irish Longitudinal Study on Ageing: Data Processing Methods
Hugh Nolan¹, Rose Anne Kenny¹
¹Trinity College Dublin, Dublin, Ireland.

Oral Session 6: Balance and Falls

Location: Charles Parsons Lecture Theatre (C1-063)

Chair: Claudia Mazzà, University of Sheffield, South Yorkshire, England, UK.

08:00 – 08:15

06.1 Quality of mobility during daily life is compromised in elderly fallers
Martina Mancini¹, Mahmoud El-Gohary², Jeffrey Kaye¹, Fay Horak¹
¹Oregon Health & Science University, Portland, Oregon, USA, ²APDM Inc, Portland, Oregon, USA.

08:15 – 08:30

06.2 Smartphone-based Fall Detection Algorithm and Validation
Joana Silva¹, Bruno Aguiar¹, Tiago Rocha¹, Filipe Sousa¹, Ines Sousa¹
¹Associação Fraunhofer Portugal Research, Porto, Portugal.

08:30 – 08:45

06.3 From gait labs to the real world - a new generation of outcome measures based on mobile accelerometry in ageing research: results from an international symposium
Martinn Daumer¹,
¹SLC - The Human Motion Institute / Trium / TUM, Munich, Germany.

08:45 – 09:00

06.4 WIISEL: Wireless Insole for Independent and Safe Elderly Living
Richard Harte¹, Monica Casey¹, Patrick Hayes¹, Gearóid ÓLaighin¹, Elisenda Reixach², Carlos Carenas³, Cristina Rusu⁴, John Rosevall⁵, Stefan Burkard⁶, Jordi Chamagué⁷, Liam Glynn¹
¹National Centre for Biomedical Engineering and Science, National University of Ireland, Galway, Ireland, ²CETEMMSA, Av. d'Ernest Lluch 36 - Parc Científic i de la Innovació TecnoCampus, 08302, Mataró, Barcelona, Spain, ³CETESSMA, Av. d'Ernest Lluch 36 - Parc Científic i de la Innovació TecnoCampus, 08302, Mataró, Barcelona, Spain, ⁴Acreo, Swedish ICT AB, Sensor Systems Department, Kista, Sweden, ⁵Acreo, Swedish ICT AB, Sensor Systems Department, Kista, Sweden, ⁶Spring techno GmbH & Co. KG, Hermann-Köhl-Str. 7, 28199, ⁷T.I. GEISA, s.l., C. Ramon LLull s/n, P.I. Can Trias, 08232, Viladecavalls, Barcelona, Spain.

09:00 – 10:00

Keynote Speaker:

Location: Jean Monnet Theatre (DG-016)

KS-3: James Levine, Mayo Clinic, Arizona State University, Arizona, USA.

Title: Sick or Sitting - How Chairs Kill.

Chair: Genevieve Healy, University of Queensland, Queensland, Australia.
10:00 – 10:30  **Coffee Break:**

**Location:**  Main Exhibition Hall (EG0-10)

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10:30 – 11:45  **Exhibitor Talks:**

**ActiGraph:**
**PAL Technologies:**
**ACTIVINSIGHTS:**
**Shimmer:**
**McRoberts:**
**Gait Up:**
**OpenVivo**
**CamNTech**
**movisens**

**Location:**  Jean Monnet Theatre (DG-016)

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11:45 – 13:00  **Poster Session 3:**

**Location:**  Main Exhibition Hall (EG0-10)

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13:00 – 14:00  **Lunch:**

**Location:**  Red Raisin Cafe

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14:00 – 15:00  **Invited Speakers**

**Location:**  Jean Monnet Theatre (DG-016)

**IS-7:**  Claudia Mazzà, Department of Mechanical Engineering, University of Sheffield, UK.

**Title:**  *Gait Balance Control: Watch Your Step from Head to Toe.*

**IS-8:**  James McLaughlin, Engineering Research Institute, University of Ulster, Northern Ireland.

**Title:**  *Engineering and Device Development: Modern Diagnostics Calls on Smart and Robust Integrated Sensor Systems in order to Transform our Healthcare.*

**Chair:**  John Nelson, University of Limerick, Limerick, Ireland.
Oral Session 7: Physical Activity: Measurement & General Issues 2

Location: Jonathan Swift Lecture Theatre (B1-023)

Chair: Søren Brage, University of Cambridge School of Clinical Medicine, Cambridge, UK.

14:00 – 14:15  07.1 Using a machine learning approach to enhance prediction of children's energy expenditure
Kelly Mackintosh¹, Alexander Montoye², Karin Pfeiffer³, Melitta McNarry¹
Swansea University, Swansea, Wales, UK, ²Ball State University, Muncie, Indiana, USA, ³Michigan State University, Michigan, USA.

14:15 – 14:30  07.2 Video Direct Observation to Assess Children's Free-Play Physical Activity during School Recess
Cheryl Howe¹, Kimberly Clevenger¹, Joann Benigno¹
¹Ohio University, Athens, Ohio, USA.

14:30 – 14:45  07.3 Smartphone Based Physical Activity Recognition with Geospatial Awareness
John J Guiry¹, Pepijn van de Ven¹, John Nelson¹
¹Department of Electronic and Computer Engineering, University of Limerick, Limerick, Ireland.

14:45 – 15:00  07.4 Development of wrist-independent energy expenditure prediction models from raw accelerometer data
Alexander Montoye¹, James Pivarnik², Lanay Mudd², Subir Biswas³, Karin Pfieffer²
¹Ball State University, Muncie, Indiana, USA, ²Michigan State University, Michigan, USA.

Oral Session 8: Measuring and Optimising Physical Behaviours in Clinical Populations 2

Location: Charles Parsons Lecture Theatre (C1-063)

Chair: Amanda Clifford, University of Limerick, Limerick, Ireland.

14:00 – 14:15  08.1 Further development of the instrumented Bath Ankylosing Spondylitis Functional Index (iBASFI) in axial spondyloarthritis: the added value of complex accelerometry-derived movement features for activity capacity assessment
Lieven Billiet¹, Thijs Swinnen¹, Milica Milosevic¹, Wim Dankaerts¹, Sabine Van Huffel¹, René Westhovens¹, Kurt de Vlam¹
KU Leuven, Leuven, Vlaams-Brabant, Belgium.

14:15 – 14:30  08.2 Treating gait impairments of patients with Parkinson’s disease by means of real-time biofeedback in a daily life environment: The Cupid System
Lorenzo Chiari¹, Pieter Ginis¹, Moran Dorfman³, Anat Mirelman³, Alice Nieuwboer², Alberto Ferrari¹
¹University of Bologna, Bologna, Italy, ²KU Leuven, Leuven, Vlaams-Brabant, Belgium, ³Tel Aviv Sourasky Medical Center, Tel Aviv, Israel.
08.3 Measurement of physical activity by accelerometry and doubly labeled water predicts growth in preschool-aged children
Nancy Butte¹, Maurice Puyau¹, Yan Liu¹, William Wong¹, Theresa Wilson¹, Anne Adolph¹, Roman Shypailo¹, Issa Zakeri²
¹Baylor College of Medicine, Houston, Texas, USA, ²Drexel University, Philadelphia, USA.

08.4 Relationship between Changes in MVPA Time and peak 30-min Cadence
Catrine Tudor-Locke¹, John Schuna, Jr.², Damon Swift³, Sandra Larrivee¹, Corby Martin¹, William Johnson¹, Timothy Church¹
¹Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA, ²Oregon State University, Oregon, USA, ³East Carolina University Greenville, North Carolina, USA.

Coffee Break:
Location: Main Exhibition Hall (EG0-10)

Poster Session 4:
Location: Main Exhibition Hall (EG0-10)

Keynote Speaker:
Location: Jean Monnet Theatre (DG-016)

KS-4: Lynn Rochester, Institute of Neuroscience, Newcastle University, Newcastle, UK.

Title: Ambulatory Activity in Parkinson’s – Pushing the Boundaries of Measurement.

Chair: Johannes Bussmann, Erasmus Medical Centre, Rotterdam, Netherlands.

Conference Banquet:
Location: Strand Hotel, Limerick City Centre.
Friday 12\textsuperscript{th} June:

08:45 – 10:15 Parallel Symposia:

Location: Jonathan Swift Lecture Theatre (B1-023)

S-4: Collecting and Processing 24-hour Waist-Worn Accelerometer Data in Children.

Host: Tiago Barreira, Syracuse University, New York, USA.

Participants: John Schuma Jr., Oregon State University, Oregon, USA.

Introducer: Brian Carson, University of Limerick, Limerick, Ireland.


Location: Charles Parsons Lecture Theatre (C1-063)

Host: Aiden Doherty, University of Oxford, Oxford, UK.

Participants: Johanna Hanggi, University of Applied Sciences, Northwestern Switzerland.
Katherine Ellis, University of California, San Diego.

Introducer: Kieran O’Sullivan, University of Limerick, Limerick, Ireland.

10:15 – 10:45 Coffee Break:

Location: Main Exhibition Hall (EG0-10)

10:45 – 11:45 Invited Speakers:

Location: Jean Monnet Theatre (DG-016)

IS-9: Dale Esliger, School of Sport, Exercise and Health Sciences, Loughborough University, Leicestershire, UK.

Title: Bio-Behavioural Feedback: Integrating Continuous, Non-Invasive Measures to Achieve Better Health.

IS-10: Patty Freedson, Department of Kinesiology, University of Massachusetts, Amherst, Massachusetts, USA.

Title: New Frontiers for the ‘Quantified Self’.
Oral Session 9: Sedentary Behaviours: Measurement & General Issues 2

Location: Jonathan Swift Lecture Theatre (B1-023)

Chair: Katrien Wijndaele, MRC Epidemiology Unit, Cambridge, UK.

10:45 – 11:00 09.1 Reallocating time from sitting to standing or to stepping: cross-sectional associations with cardiometabolic risk biomarkers in Australian adults
Genevieve Healy¹, David Dunstan², Elisabeth Winkler¹, Neville Owen²
The University of Queensland, Brisbane, Queensland, Australia, ²Baker IDI Heart & Diabetes Institute, Melbourne, Victoria, Australia.

11:00 – 11:15 09.2 Objectively measured sedentary behaviour patterns according to diabetes status: The Maastricht Study
Annemarie Koster¹, Julianne van der Berg¹, Hans Bosma¹, Jeroen van der Velde¹, Paul Willems¹, Hans Savelberg¹, Miranda Schram¹, Simone Sep¹, Carla van der Kallen¹, Ronald Henry¹, Pieter Dagnelie¹, Nicolaas Schaper¹, Coen Stehouwer¹
Maastricht University, Maastricht, Netherlands.

11:15 – 11:30 09.3 Associations between sedentary behaviour, moderate to vigorous physical activity and cortical bone size in children
Rebecca Meiring¹, Lisa Micklesfield², Andrew Green¹, Joanne McVeigh¹
¹Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, Gauteng, South Africa, ²MRC/Wits Developmental Pathways for Health Research Unit, University of the Witwatersrand.

11:30 – 11:45 09.4 Validity of objectively measured sedentary behaviour against waist circumference
Pauliina Husu¹, Jaana Suni¹, Kari Tokola¹, Henri Vähä-Ypyä¹, Harri Sievänen¹, Tommi Vasankari¹
¹The UKK Institute for Health Promotion Research, Tampere, Finland.

Oral Session 10: Data Processing, Analysis and Statistics

Location: Charles Parsons Lecture Theatre (C1-063)

Chair: Sebastien Chastin, Glasgow Caledonian University, Glasgow, Scotland, UK.

10:45 – 11:00 10.1 Actigraphy features for predicting mobility function in older adults
Todd Manini¹, Catrine Tudor-Locke², Robert Axtell³, Matthew Buman⁴, Roger Fielding⁵, Nancy Glynn¹, Don Hire⁶, Jack Guralnik⁷, Abby King⁸, Dan White⁹, Michael Miller⁶, Juned Siddique¹⁰, Peter Brubaker⁶, W. Jack Rejeski⁶, Stephen Ranshous¹, Matin Kheirkhahan¹, Marco Pahor¹, Sanjay Ranka¹
11:00 – 11:15

**10.2 Open Platforms to Sustain and Reuse Component Contributions**

Jon Moon¹, Jared Sieling¹, Erik Iverson¹

MEI Research, Edina, Minneapolis, USA.

11:15 – 11:30

**10.3 Validation of an automated STATA algorithm developed for isolating waking wear data in activPAL data**

Charlotte Edwardson¹, Kishan Bakrania¹, Danielle Bodicoat¹, Tom Yates¹, Genevieve Healy², Elisabeth Winkler²

¹Diabetes Research Centre, University of Leicester, Leicester General, Leicester, Leicestershire, ²The University of Queensland, Brisbane, Queensland, Australia.

11:30 – 11:45

**10.4 Trajectory patterns for Australian adults? Sedentary behaviour and moderate- to vigorous-intensity physical activity over 12 years**

Paul Gardiner¹, Libby Holden¹, Bridig Lynch², Genevieve Healy¹, Natasha Reid¹, Bronwyn Clark¹, David Dunstan³, Neville Owen³

¹The University of Queensland, Brisbane, Queensland, Australia, ²Cancer Council Victoria, Melbourne, Victoria, Australia, ³Baker IDI Heart and Diabetes Institute, Diabetes Institute, Melbourne, Victoria, Australia.

11:45 – 12:45

**Keynote Speaker:**

**Location:** Jean Monnet Theatre (DG-016)

**KS-5:** Greg Welk, Department of Kinesiology, Iowa State University, Iowa, USA.

**Title:** Objective Physical Activity Monitoring: New Directions and New Opportunities.

**Chair:** David Bassett, University of Tennessee, Knoxville, Tennessee, USA.

12:45 – 13:00

**Closing Ceremony & Prize Presentation:**

**Location:** Jean Monnet Theatre (DG-016)

**Host:** Alan Donnelly, Conference Chair, University of Limerick, Limerick, Ireland

14:00 – 21:30

**Optional Tour:**
Location: Cliffs of Moher and Doolin Village.