



UNIVERSITY of LIMERICK
OLLSCOIL LUIMNIGH



4th INTERNATIONAL CONFERENCE ON AMBULATORY MONITORING OF PHYSICAL ACTIVITY AND MOVEMENT



10-12
June
2015



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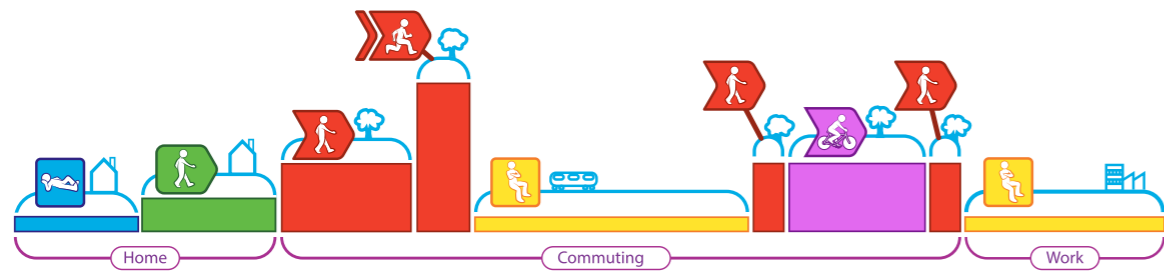
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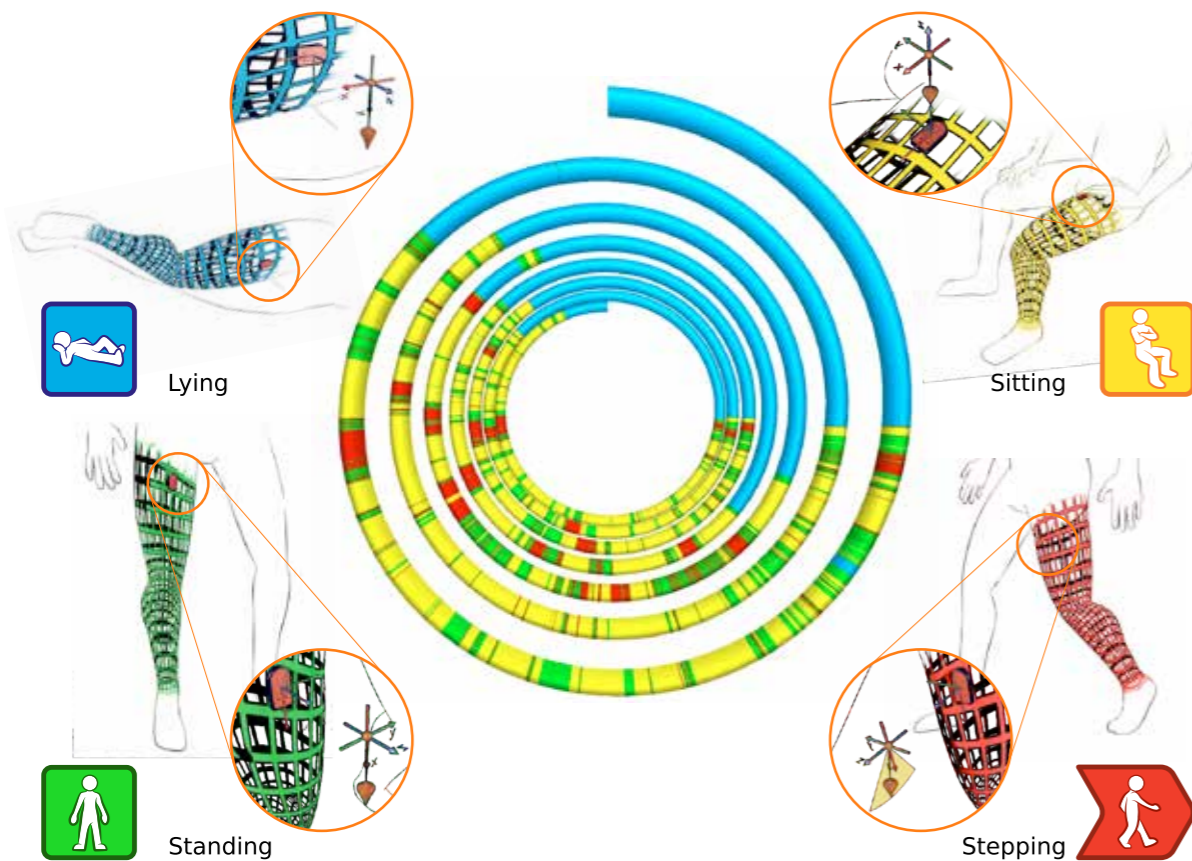
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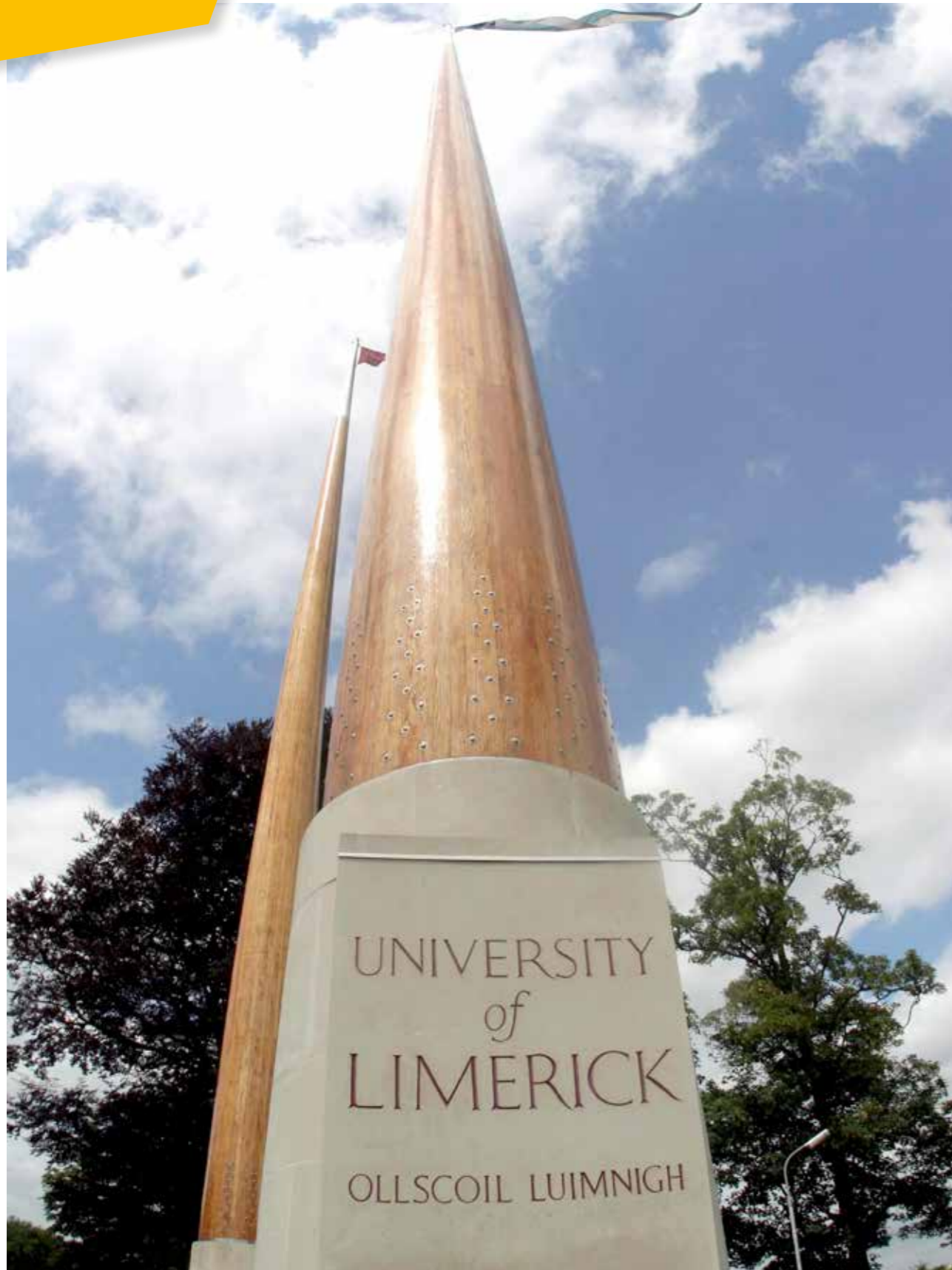
4TH INTERNATIONAL CONFERENCE ON AMBULATORY MONITORING OF PHYSICAL ACTIVITY AND MOVEMENT

10-12 June 2015



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Welcome to ICAMPAM 2015

Dear ICAMPAM participants,

We welcome you to the 4th International Conference on Ambulatory Monitoring of Physical Activity and Movement (June 10-12th 2015) in Limerick, Ireland. The University of Limerick is pleased to host this conference, and we hope that you will enjoy your time in Limerick.

We bring together leading researchers, new investigators and research students whose interests are in the measurement of physical behaviours including physical activity, sedentary behaviour and sleep. The programme includes 5 keynote speakers, 10 invited speakers, 44 slide presentations and 161 poster presentations. This is a global conference, with attendees from across Europe, North and South America, Africa, the Middle East, Asia, Australia and New Zealand. We believe that this conference will lead to valuable and stimulating discussions. We encourage you to attend the special session at 10.30-11.45 AM on Thursday 11th June where the exhibitors will have the opportunity to present their products. We also recommend that you attend the International Society for the Measurement of Physical Behaviours (ISMBP) formation meeting, to be held on Wednesday evening.

Social events include the opening reception on Tuesday evening in the University of Limerick sports Pavilion, and the banquet celebration on Thursday evening in the Strand Hotel in Limerick city centre. Lunches and coffee breaks will also provide an opportunity for you to meet colleagues and to network. For those who are staying over on Friday afternoon, we have organised a bus tour to the Cliffs of Moher and Doolin in County Clare.

Our hosting of the conference would not be possible without the help and support of a good number of people. These include the board of directors of the ISMPB, the conference Scientific Committee, and especially the members of the Local Organising Committee, whose work has brought this conference about. Thanks are due to DJ Collins from the Department of Physical Education and Sport Sciences for his work leading up to and during the conference. We would also like to thank the 25 University of Limerick students who have worked on the conference preparations and will be helping during the conference.

On behalf of the Local Organising Committee and the Scientific Committee, welcome to ICAMPAM 2015.

Alan Donnelly
ICAMPAM2015 Chair



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ICAMPAM 2015 General Information

Conference Office:

The ICAMPAM 2015 conference office will be located in the Main Exhibition Hall (Room Number EG-004). The conference office will be signposted within the Main Exhibition Hall and Main Reception Area. The conference office hours are:

June 9th:	12:00–19:00
June 10th:	07:00–19:00
June 11th:	07:00–17:30
June 12th:	08:30–13:00

The conference organisers can be contacted between 08:00–18:00. Contact numbers are available on the "Contact Us" page of the conference website. These numbers are also available in the Abstract Programme Booklet, which is available as a PDF on the conference website. These numbers will be available throughout the conference in case of an emergency. In the case that the conference office is closed for any reason, please visit the registration desk (directly above the Main Exhibition Hall). ICAMPAM representatives will be present at the registration desk and conference office during all opening hours listed above.

Name Badges:

Name badges will be provided to all delegates upon registration. Please ensure that name badges are worn at all times throughout the conference. The badge allows delegates access to all events on the scientific programme. It also allows conference staff to identify conference delegates, and will ensure that conference staff will be able to assist you at all times.

Conference Staff:

Conference staff will be on hand to assist you with any questions or issues you may have throughout the conference. All conference staff will be easy to identify as they will be wearing the official ICAMPAM 2015 conference t-shirt.

Lunch and Breaks:

All lunches and breaks will be provided as outlined in the conference schedule. Lunch will be served in the Red Raisin Café on the first floor of the conference venue (situated between the Jonathan Swift Lecture Theatre and the Charles Parsons Lecture Theatre). Tea/coffee will be served outside in the corridor outside the Charles Parsons Lecture Theatre on Tuesday 9th June. During the conference (Wednesday 10th–Friday 12th) tea/coffee will be served in the Main Exhibition Hall (Conference Map location 13 – Room Number: EG-010). It is important that your name badge is displayed for all lunch and tea/coffee breaks.

Room Allocation:

The room names for the University of Limerick are abbreviated, and all University of Limerick staff and students are familiar with these. All rooms will be signposted, and all members of the University community will be able to provide directions. The room names and their numbers are provided below:

- Jean Monnet Lecture Theatre – DG-016
- Jonathan Swift Lecture Theatre – B1-023
- Charles Parson Lecture Theatre – C1-063

Speaker Ready Room:

The Speaker Ready Room will be well signposted, and will be situated in the Main Exhibition Hall (Room number EG-005). All presentations must be uploaded onto the ICAMPAM laptops in the Speaker Ready Room according to the schedule that presenters have been provided with. Authors should clearly identify themselves to the ICAMPAM conference representative in the Speaker Ready Room and specify the room, date and time of their presentation. Files must be provided on a USB Memory Stick. During your visit to the Speaker Ready Room, a conference representative will help you load your presentation on the host computers, run through it, and ensure it is working properly. Your presentation will then be transferred from the Speaker Ready Room to the room where you will be presenting. Please ensure that you go to the presentation room a minimum of 15 minutes before the start of your session to run through the presentation one final time and to meet the Chair and fellow presenters of the session.

Scientific Programme:

A comprehensive scientific programme has been designed and prepared for ICAMPAM 2015. The programme is comprised of 5 Keynote Presentations, 10 Invited Speaker Sessions, 10 Oral Presentations and 4 Poster Sessions with over 150 posters to be presented. The conference is also supplemented with 5 Symposia and 4 Pre-Conference Workshops delivered by leading researchers in the field.

Conference Exhibitors:

A technical exhibition by nine international companies will take place in the Main Exhibition Hall (Conference Map location 13 – EG-010) throughout the duration of the conference. The main exhibition hall will also be where all poster presentations will take place, while daily refreshments (tea/coffee) will all be served here. The Main Exhibition Hall will be open on the dates and times below.

June 10th:	07:00–19:00
June 11th:	07:00–17:30
June 12th:	08:30–13:00

All sponsors and exhibitors will provide an exhibitor presentation in the Jean Monnet Lecture Theatre from 10:30 on Thursday 11th June.

Oral Presentations:

Oral presentations (excluding Keynote and Invited Speakers) are restricted to 15 minutes. You should speak for a maximum of 10 minutes allowing 3 minutes for questions and 2 minutes change over to the next speaker. The session chairperson will ensure that no presentations run over the allocated time, so please ensure that your presentation is well rehearsed and within time limits. All oral presenters will be using computers provided by the ICAMPAM 2015 Local Conference Organising Committee. No personal laptop or notebook computers will be allowed for oral presentations. The committee asks that all presenters upload their presentations onto the conference laptops in the Speaker Ready Room according to the schedule and guidelines provided by the local conference organising committee. Please ensure that your presentation is completely functional prior to leaving the Speaker Ready Room, particularly if you have embedded videos or animations. Please report to the appropriate theatre at least 15 minutes prior to the beginning of the oral session, and introduce yourself to the session chairperson and fellow session speakers and run through your presentation one final time. Access to a laser pointer will be provided.

Poster Presentations:

Your poster should not be larger than A0 size (841 mm wide x 1189 mm tall). Poster boards are 1 metre wide and 2 metres high. Posters must be in portrait (tall) format. Posters should be made of paper or thin cardboard. Heavy board materials may be difficult to keep in position on the panel. Posters will be attached using Velcro, which will be provided by the conference staff at the venue.

Each poster has been allocated to one of 4 poster sessions which will be held in the Main Exhibition Hall (Conference Map location 13 – EG-010). There are 2 poster sessions on Wednesday 10th June and 2 poster sessions on Thursday 11th June. In this programme, each poster has been allocated a poster number (e.g. PS1.24). This poster corresponds to a poster session and board number (Poster Session 1; Board Number 24). Please ensure that you locate your poster at the corresponding position allocated to you. Posters should be fixed to the poster boards using Velcro strips provided by the ICAMPAM conference representative, and removed by the presenting author themselves at the time specified below. Presenting authors should ensure that they are standing by their posters during the dedicated viewing times below to be available to interact with conference delegates throughout.

	Mounted Between	Dedicated Viewing Time	Removed By
Session 1 (Wed 10 th)	7:00 and 8:15	10:30 - 11:45	12:00
Session 2 (Wed 10 th)	12:00 and 13:15	16:15-17:30	18:00
Session 3 (Thurs 11 th)	7:00 and 8:15	11:45-13:00	13:00
Session 4 (Thurs 11 th)	13:00 and 14:00	15:15-16:30	16:30

General Assembly:

A general assembly on the formation of the International Society for the Measurement of Physical Behaviours is scheduled for 18:30 on Wednesday 10th June, and will be held in the Jean Monnet Lecture Theatre (Conference Map Location 13). All members of the society and prospective members of the society are encouraged to attend and contribute to the meeting.

Internet Access:

Wireless internet access is available in the majority of buildings within the University of Limerick. This includes the Main Exhibition Hall and all lecture theatres where oral presentations are to be delivered. The wireless network connection that delegates should search for on their devices is "UL Wireless". Ethernet internet access is available in University village accommodation. Please contact Cappavilla reception (Tel: +353 61 237500) for further information on this.

Transportation:

There is a direct bus route from the University of Limerick to Limerick City Centre (#304) from 07:00 - 22:45. The bus stop is located beside the stables bar on the main campus road (Conference Map Location 16), and will bring you to O'Connell Street in Limerick City Centre. This bus also continues to the Crescent Shopping Centre. The bus stop to get the returning bus to the University of Limerick is located near the Centra shop on William Street in the City Centre. These buses run regularly throughout the day. An adult single fare is €2.00. Another option of transport to visit the city is using one of the taxi services. A taxi from the University of Limerick to Limerick City Centre costs approximately €15 for 4 people. The ICAMPAM 2015 information table/registration table (Conference Map Location 13 – Above EG-010), or members of ICAMPAM 2015 staff will be able to assist you with taxi numbers.

Accommodation:

For delegates that are staying on campus at Cappavilla Village (Conference Map Location 38), delegates can check-in from 16:00 to 20:00 on expected day of arrival. If you are arriving after 20:00, please contact Cappavilla Reception in advance. The village manager can arrange for a member of staff to meet late arrivals at Reception for late check-in. The check-out time from the campus accommodation is 12:00 on all days. Storage facilities are available at Cappavilla Village for your luggage, in case you wish to leave your luggage until your departure time. Please enquire with Cappavilla reception to avail of this service, or with any other questions you may have. Reception can be contacted on +353(0)61 237500.

Campus Parking:

Parking on campus for non-staff members is restricted to the designated pink car parking location on the Conference Map. This is free parking, and car parks are monitored by campus security. Parking in other car parks on campus is unauthorised. Unauthorised parking on campus will result in clamping by campus security. The release fee for clamped vehicles is €25 (Tel: +353-61-202001). Please ensure at all times that you are parked in designated parking zones only.

Sports Facilities:

The University of Limerick is home to the University Arena Sports complex, which includes a 50 metre pool, large gymnasium and indoor running track. The Arena opening hours are 07:00 – 22:45 on Monday to Friday and 09:00 – 21:00 on Saturdays. Complimentary use of the facilities is provided to delegates throughout the conference. Delegates should simply display their conference badge to reception.

The University is situated on the banks of the river Shannon, and there are some beautiful cross-country running paths from the University along the banks of the Shannon. These areas are quiet, especially early in the morning and late at night, so please be sure to run these paths with a partner.

After Hours:

There is a wide range of after-hours activities available. There are 4 bars located on campus, the Stables and Scholars bars (Conference Map Location 16), the Arena bar (Conference Map Location 23) and the Pavilion bar and restaurant (Conference Map Location 36). The hours of these bars change from semester time to summer months, so be sure to check with Cappavilla Reception (Tel: +353 61 237500). There are also a selection of quality bars and restaurants in the surrounding areas of Castletroy, while Limerick City Centre is famous for its traditional music, bars and fine dining.

Social Events:

Opening Reception: Tuesday 9th June – 20:00–22:00

Location: The Pavilion, University of Limerick

The Pavilion has a panoramic view of Ireland's emerald green. Delegates can relax in the spiritual sound of the famous Irish harpsicord, accompanied by the complementary drinks and delicate canapés. All are included in the conference reception package.

Banquet Dinner: Thursday 11th June – 19:00–23:00

Location: Strand Hotel, Limerick City

Please remember your ticket when attending the Banquet Dinner – the ticket will be handed out during conference registration.

Buses depart to the Strand Hotel from each of the following venues at 18:30 - Main Conference Venue (Campus Map Location 11), Cappavilla Village, Castletroy Park Hotel and Kilmurry Lodge Hotel. For delegates who wish to return to their conference official accommodation after the banquet, a bus service has been scheduled to depart the Strand Hotel at 23:00.

The fabulous 4* Strand Hotel is situated on the banks of the majestic River Shannon in the heart of the city. It is one of Limerick's most popular venues for business and social activity. The evening will begin with welcoming drinks in the hotel lobby, or the newly renovated outdoor Secret Garden, where delegates can ease into the mood of the night, followed by the silver-service banquet where food and wine will be served in the Shannon Suite. A cash bar will also be available. Live music and traditional Irish dancing will keep delegates entertained (and even physically active!) throughout the night. Please note that the dress code for this event is 'smart casual'.

Half-Day Tour: Friday 12th June – 14:00–21:30

Please remember your ticket when attending the half-day tour - the ticket will be handed out during conference registration.

The half-day tour departs from outside the Main Conference Venue (Campus Map Location 11) at 14:00. The bus will return to Limerick City Center and the conference official accommodation at approximately 21:30.

*Please be reminded to bring extra layers of clothing and if possible a raincoat or an umbrella.

*For the Cliffs of Moher, entry fee is included in the tour; For Gus O'Connor's Pub, all major credit cards (except American Express) and cash are accepted for the purchase of food and drinks.

The tour will take the delegates to the majestic Cliffs of Moher and to experience Irish hospitality at the renowned traditional Irish pub, Gus O'Connor Pub, for an early evening meal/snacks accompanied with delightful live Irish music.

The Cliffs of Moher (Irish: Aillte an Mhothair) is one of Ireland's top Visitor attractions, drawing almost one million visitors in 2006. The Cliffs are 214m high at the western seaboard of County Clare. O'Brien's Tower stands proudly on a headland of the majestic Cliffs. The Cliffs boast one of Ireland's most spectacular views: from the Cliffs, one can see the Aran Islands, Galway Bay, as well as the Twelve Pins, the Maum Turk Mountains in Connemara and Loop Head to the South.

By the hillside approaching the Cliffs, there is the Cliffs of Moher Visitor Experience which blends naturally with the surrounding countryside. The center is also environmentally sensitive in its use of renewable energy systems including geothermal heating and cooling, solar panels, and greywater recycling. Officially opened in February 2007 having been meticulously planned and built over 17 years, the visitor centre explores topics such as the origin of the Cliffs in local and global geological contexts, the bird and fish life in the area, and much more.

To finish off the tour, delegates will be taken to Gus O'Connor's Pub located in Doolin, County Clare. Doolin is celebrated as a centre for traditional Irish music, and Gus O'Connor's pub is the oldest and best music venue in the picturesque town, famed for its hospitality and the superb quality of food served.

ICAMPAM 2015 Pre-Congress Workshops

Workshop Session 1A: Body Worn Monitors: Sensor Configuration and Understanding the Underlying Hardware.

Presenter: Cas Ladha, Computing Science, Newcastle University, Newcastle, UK.

Description: The purpose of this workshop is to disseminate engineering practice for body worn monitor (BWM) design and development to those in the applied clinical sciences. Quite often BWM are chosen for clinical studies without understanding their true measurement capabilities. This workshop will strip back BWM to show exactly what they can/cannot measure with demonstrations on how all commercial/research BWM have the same underlying functionality. In addition an overview of where the engineering developments should focus for future developments will be presented.

Date and Time: Tuesday 9th June 14:00–15:30

Room Number: Jonathan Swift Lecture Theatre (B1-023)

Workshop Session 1B: Take Another Look at your Data - The Use of Visualisation in Understanding Complex Data Sets.

Presenter: David Loudon, Glasgow School of Art & PAL Technologies Ltd, Glasgow, UK.

Description: Conventional approaches in data analysis are often data-centric and fail to address the needs of the clinical subject or population. For example conventional laboratory-based gait assessment provides detailed insights into the biomechanical expression of the impairment but this information is not easily accessed or understood by the therapist or patient and so patient engagement in the therapeutic process is undermined. Similarly, in the field of physical activity assessment, existing methodologies have been largely based on the estimation of free-living energy expenditure and paid little regard to the behaviours and activities generating the energy expenditure. This workshop will address ways in which data analysis and visualisation can be made person-focused, bringing the patient or participant needs to the centre and where appropriate engaging them with the performance measures directly.

Date and Time: Tuesday 9th June 14:00–15:30

Room Number: Charles Parsons Lecture Theatre (C1-063)

Workshop Session 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.

Description: The purpose of this workshop will be the quantification of gait characteristics using body worn monitors (BWM) from instrumented tasks within the laboratory (micro) to habitual ambulatory behaviour (macro) in the community, i.e. 7 day data. Current algorithms to quantify gait characteristics will be presented and discussed along with current challenges in the analysis of micro-based gait data gathered in the community. In addition current macro level analysis of gait (ambulatory behaviour) will be discussed with avenues of potential analysis presented.

Date and Time: Tuesday 9th June 15:45–17:15

Room Number: Jonathan Swift Lecture Theatre (B1-023)

Workshop Session 2B: Grant Writing Workshop.

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

Description: This workshop will target effective grant proposal writing at a time when applying for research funding has never been more competitive. Covering all aspects of the proposal writing process, the workshop is geared for early-stage investigators including graduate students and postdoctoral fellows, but also valuable for experienced faculty, clinicians, epidemiologists, and health professionals who cannot seem to break the barrier to obtain funded research.

Date and Time: Tuesday 9th June 15:45–17:15

Room Number: Charles Parsons Lecture Theatre (C1-063)

ICAMPAM 2015 Symposia

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

Host: Dale Eslinger, Loughborough University, Leicestershire, UK.

Description: This symposium will illustrate the utility of novel technology to assess the context of physical activity and sedentary time alongside more established measures of behavior such as accelerometry. This contextual assessment can provide researchers with a more comprehensive elucidation of the behavior which can be used to better refine interventions. The symposium takes a broad approach incorporating the conceptualization of context, an overview of technologies to assess the components of context and examples of the value added by these technologies to recent research conducted within our group.

Date and Time: Tuesday 9th June 17:45–19:15

Room Number: Jonathan Swift Lecture Theatre (B1-023)

Symposium 2: A Holistic Approach in Measuring Occupational Physical Activity: Challenges and Potentials

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

Description: Considering that adults spend a considerable proportion of their day at work, employment is a key determinant for daily PA. However, specifics of how and under what circumstances occupational PA (OPA) influences total PA, including other PA domains (e.g. leisure time PA, transport), are unclear. Little is also known about OPA patterns in different occupational groups and how OPA patterns can be changed, among for example those who have mostly sedentary occupations. One important issue concerns if working in a standing position and the use of dynamic chairs has any effect on OPA levels, for instance among office workers. This despite the fact that ergonomists advocate sedentary workers to work in a standing position or use an "active sitting" approach using "dynamic" chairs. To be able to give recommendations regarding PA to employees with different OPA, more insight is needed on how to optimally measure OPA. To move the field forward, knowledge should be combined from different disciplines involved in measuring OPA. Therefore, we want to initiate an interdisciplinary discussion on appropriate measurements of OPA. The aim of the symposium is to present a holistic approach to measuring OPA by combining our

expertise in the field of PA and health, measurement of PA using objective measures and self-reported measures, ergonomics, occupational health and public health science.

Date and Time: Tuesday 9th June 17:45–19:15

Room Number: Charles Parsons Lecture Theatre (C1-063)

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

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

Description: The classification of physical activity and sedentary behavior among older adults has not been well examined, particularly in relation to accelerometer wear locations. The Aging Research Evaluating Accelerometry (AREA) study is a methodological study designed to examine the impact of accelerometer wear location on physical activity and sedentary behavior assessment among older adults (N = 81, mean (SD) age = 78.5 (5.5) years). The AREA study consisted of two components: laboratory visits, assessing metabolic costs with Cosmed during 15 common daily activities and functional tests; and 7 days of free-living data. Participants simultaneously wore 5 monitors: an ActiGraph worn on the left and right wrist, a hip-worn ActiGraph, an ActivPal worn on the upper thigh, and a Sensewear on the upper arm. The symposium includes four presentations, including a study overview to encourage collaboration. The research findings include: 1) Using ActivPal as a reference, we tested the performance of ActiGraph wrist and hip count-based cutpoints to classify sedentary behavior in free-living; 2) Using raw accelerometer data, we developed an algorithm to detect walking and will present the algorithm and a discussion of the challenges of working in older adults due to varying gaits and stability levels; and 3) Expanding on previous research, we assessed whether wrist-worn accelerometers yield similar physical activity patterns over the course of the day as hip-worn accelerometers.

Date and Time: Wednesday 10th June 11:45–13:15

Room Number: Jonathan Swift Lecture Theatre (B1-023)

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

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

Description: In recent times, researchers have begun to collect accelerometer data over the entire day (24 hours) as opposed to during waking hours only. This methodological shift serves two purposes: 1) to increase compliance to objective monitoring protocols and consequently wear time, and 2) to assess sleep time. This paradigm shift is not without problems, as the separation of sleep, non-wear, and sedentary behavior can be an arduous task complicated by the similarities exhibited in accelerometer data from these behaviors. During the International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE), our research team was faced with these problems following our implementation of a 24-hour waist-worn accelerometer protocol. Since we were one of the first research groups to implement a 24-hour waist-worn accelerometer protocol among a large sample of children (> 6,000), we created an automated algorithm (publicly available) to identify different activity types (e.g., sleep, non-wear, sedentary behavior, physical activity) from minute-by-minute accelerometer data. In this workshop we will detail the development of this novel approach to accelerometer monitoring in the following progression: 1) pre-study preparation, 2) data collection, and 3) data processing and treatment. This symposium will give an overview of challenges and benefits of a 24-hour protocol with a focus in children. We will discuss a few topics starting with pre-study preparation, followed by data collection, and ending with data processing and treatment.

Date and Time: Friday 12th June 08:45–10:15

Room Number: Jonathan Swift Lecture Theatre (B1-023)

Symposium 5: Free-Living Assessment of Wearable Sensor Data Processing Methods

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

Description: This symposium explores methods to assess physical activity behaviours in free living scenarios. Emerging machine learning methods to detect physical activity behaviours of interest from wearable sensor data have generally not been validated in free living environments. The usual validation of these methods in laboratory scenarios is unrealistic as it usually involves a limited number of activities, poor variety within each activity, and an unrealistic relative contribution in time for each activity type. This symposium will therefore explore the advantages and challenges of using methods such as wearable cameras to generate a ground truth of free living physical activity behaviours.

Date and Time: Friday 12th June 08:45–10:15

Room Number: Charles Parsons Lecture Theatre (C1-063)



ICAMPAM 2015 General Information:

Climate:

Ireland has a temperate climate, resulting in relatively cool summers. The mean daily temperature in June is 14–18°C. It is generally quite dry in June, but it is possible to experience many climate changes in one day. Rain can occur at any time, so come prepared!

Electricity Supply:

Ireland works off a flat three-pin plug system. Electrical current is 220–240 volts, 50 cycles alternating current (AC). You are advised to purchase the appropriate adapters in advance. These are available at most airports.

Credit Cards:

Credit cards are widely used in Ireland and all leading credit cards are accepted. Please consult your own bank.

Clothing:

Ireland is generally informal about clothes. In the more expensive hotels and restaurants most people dress formally for dinner and a jacket and tie might be required. Warm sweaters, comfortable walking shoes and rainwear are advisable throughout the year.

Shopping:

Shops are generally open Monday to Saturday from 09.00am to 6.00pm with late night shopping until 8.00 or 9.00pm at many of the larger stores. On Sunday, many supermarkets and some of the bigger shops will open from midday until 6.00pm.

Driving:

A valid licence is required for driving in Ireland. Driving is on the left and seat belts must be worn at all times. In the Republic of Ireland the speed limits are 50km/h in built up urban areas, 80km/h on rural Regional roads (R) and Local Roads (L), 100km/h on the National Roads (N), including dual carriageways and 120km/h on the motorways (M). The signposts denoting speed and distance are in kilometres per hour. All signposts and place names are displayed bilingually in both Irish and English.

Smoking Ban:

Since 29th March, 2004 the Irish Government has implemented a wide reaching ban on smoking. This means that smoking is forbidden in enclosed places of work in Ireland. This includes office blocks, public/state buildings (including Universities), public houses/bars, restaurants and company vehicles (cars and vans).

Currency:

The Euro is the local currency of the Republic of Ireland. One Euro consists of 100 cent. Notes are €5, €10, €20, €50, €100, €200 and €500. Coins are €2, €1, 50c, 20c, 10c, 5c, 2c and 1c.

Emergency Numbers:

Emergency Police, Fire, Ambulance: Tel: 112 or 999; these numbers are free of charge but should only be used in cases of genuine emergency. On answer, state which service you require, wait to be connected to that service, and then clearly state the location of where the assistance is required. In the case of a vehicle breakdown: Automobile Association (AA) - Tel: 1800 66 77 88 or RAC Motoring Service - Tel: 1800 535 005.

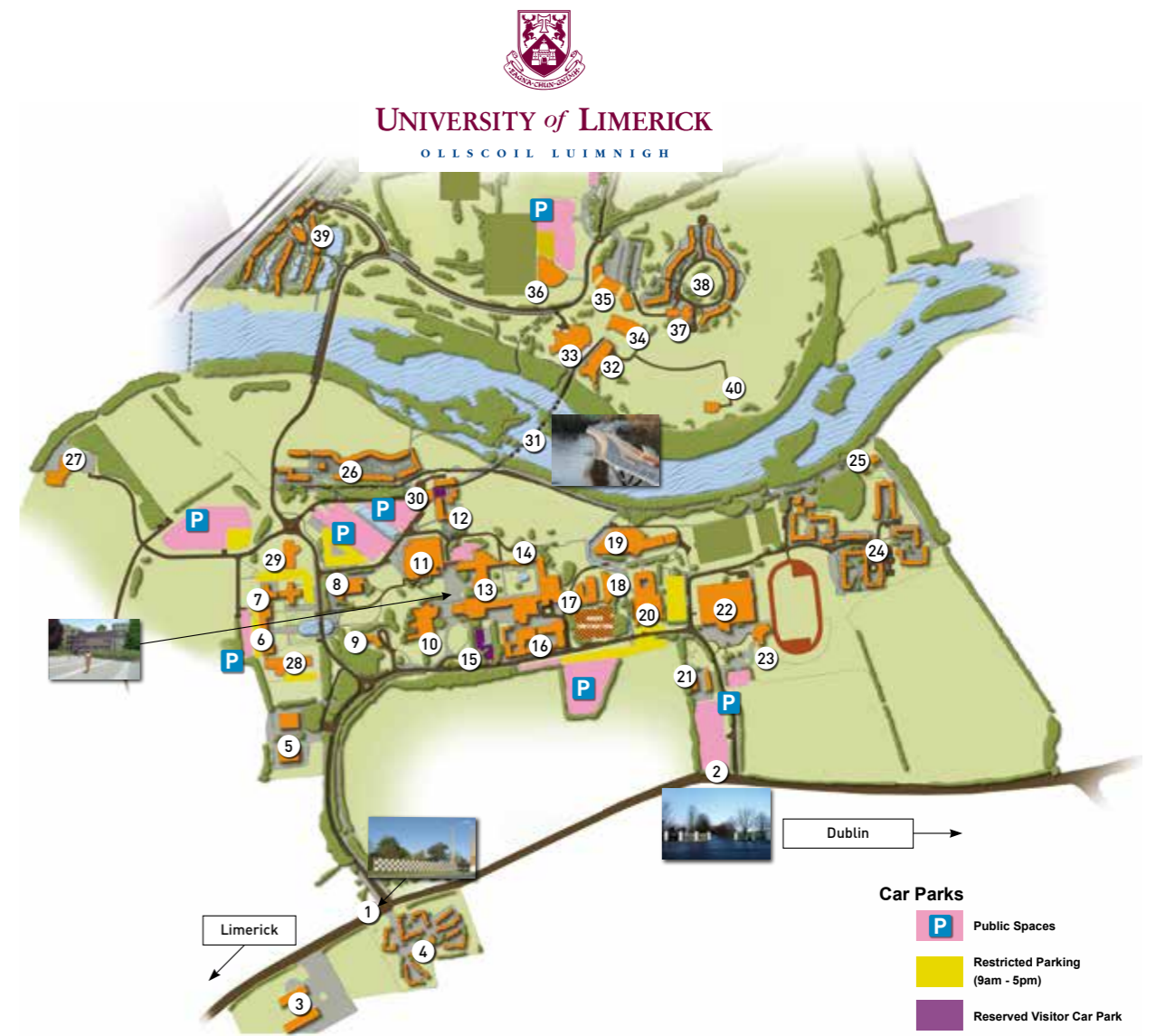
Customs:

Customs operate green, blue and red channels at most ports and airports. If you need to declare goods over the duty and tax-free allowances for non-EU visitors, you must use the red channel. Pass through the green channel if you have nothing to declare. Pass through the blue channel if you have nothing to declare and are an EU citizen. Visitors are restricted from taking agricultural produce into Ireland.

VAT and Tax Refunds:

To be able to claim a tax refund you must be a non-European Union visitor to Ireland. Look for the 'Tax Free Shopping' sign in the windows of participating shops. You must complete a valid tax refund document obtained from the retailer and present the tax refund document and goods to Customs on departure from the European Union. A customs officer will check the goods and validate the tax refund document. You can receive your refund on the spot at some airports, otherwise you should mail the validated tax refund document back to the shop and a refund will be issued.

VAT is charged on almost everything, but remember, refunds only apply to goods being taken out of the country, not services. VAT and tax refunds are not available to EU visitors.



- 27. Boathouse
- 38. Cappavilla Student Village
- 3. Carlton Castletroy Park Hotel
- 8. Computer Science Building
- 27. Dromroe Student Village
- 2. East Gate Entrance
- 12. Engineering Research Building and Millstream Courtyard
- 11. Foundation Building and University Concert Hall
- 10. Glucksman Library and Information Services Building
- 21. Grounds/Maintenance Compound
- 32. Health Sciences Building
- 25. Horticultural Unit
- 7. International Business Centre
- 5. International Science Centre
- 37. Irish Chamber Orchestra Building
- 33. Irish World Academy Building
- 17. Kathleen Lonsdale Building
- 28. Kemmy Business School
- 24. Kilmurry Student Village
- 30. Languages Building
- 13. Main University Building
- 1. Main University Entrance
- 18. Materials and Surface Science Institute
- 34. Medical School Building
- 14. Plassey House and University Close
- 4. Plassey Student Village
- 30. President's House
- 6. Robert Schuman Building
- 20. Schrödinger Building
- 16. Students Centre, Shops, Banks, Bars
- 19. Physical Education and Sport Sciences Building
- 36. Pavilion and All Weather Pitches
- 35. Quigley Residences
- 9. Silver Apples Crèche
- 31. The Living Bridge
- 23. The Sports Club
- 39. Thomond Village
- 29. Tierney Building
- 22. University Arena including 50 metre Pool
- 15. Visitors Information Centre

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activPAL™ is the researcher's preferred choice for quantifying free-living sedentary, upright and ambulatory activities providing objective evidence to link physical behaviours with chronic disease risk. It uniquely evaluates active commuting by documenting cycling time and adds context to free-living sedentary activities, separating sitting from lying and travel from chair-centred activities.

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Activinsights gives medical practitioners & healthcare providers the tools to measure lifestyle accurately. The GENEActiv range specialises in wrist-worn, raw data accelerometers for researchers in an open source environment. The objective measurement of Activinsights Band supports diagnosis, recovery, lifestyle management & behaviour change programmes. [www.activinsights.com]



Shimmer provides advanced development of wearable sensing systems. Based on award winning clinical grade sensor technology, and our open approach to innovation, we ensure that no matter what your application is our wearable sensing products and tools are designed to allow you to accelerate the development, discovery and insight that your research requires.

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We are an innovative and flexible organization with 25 years of experience, and one of the leaders in ambulatory monitoring of physical activity. We apply our knowledge of human movement and analysis of raw data to facilitate simple solutions in healthcare, pharmacy and research for evaluating physical functioning.

Exhibitors



Movement analysis and measurement

Text: Gait Up designs innovative solutions for movement analysis and measurements using wearable sensors. Physical activity is represented as a bar-code, come and discover new daily activity indexes!



Text: The UK distributor for gtec medical engineering; providing the highest fidelity equipment for wireless EEG monitoring with direct API access to MATLAB and SIMULINK.



Text: CamNtech has 20 years of experience with wearable Physical Activity monitoring. From basic accelerometry to accurate PAEE, we offer the best solutions for your study.



Text: movisens is a global leader and expert in mobile psycho-physiological measurement technologies, solutions for ambulatory assessment and sensors physical activity monitoring

Please note that the program is subject to change

Tuesday June 9th

- 12:00–20:00** **Registration Open:**
Location: Reception Area (Jean Monnet Theatre)
- 14:00–15:30** **Pre-Conference Workshops:**
- 14:00–15:30** **Workshop Session 1:**
Location: Jonathan Swift Lecture Theatre (B1-023)
WS-1A: Body Worn Monitors: Sensor Configuration and Understanding the Underlying Hardware
Presenter: Cas Ladha, Computing Science, Newcastle University, Newcastle, UK.
Introducer: Ian Kenny, University of Limerick, Limerick, Ireland.
-
- Location:** Charles Parsons Lecture Theatre (C1-063)
WS-1B: Take Another Look at your Data - The Use of Visualisation in Understanding Complex Data Sets
Presenter: David Loudon, Glasgow School of Art & PAL Technologies Ltd, Glasgow, UK.
Introducer: Fiona Ling, University of Limerick, Limerick, Ireland.
-
- 15:30–15:45** **Coffee Break:**
Location: Charles Parsons Lecture Theatre
-
- 15:45–17:15** **Workshop Session 2:**
Location: Jonathan Swift Lecture Theatre (B1-023)
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)
WS-2B: Grant Writing Workshop
Presenter: Lisa Chasan-Taber, University of Massachusetts, Amherst, Massachusetts, USA.
Introducer: Alan Donnelly, University of Limerick, Limerick, Ireland.
-
- 17:15–17:45** **Coffee Break:**
Location: Charles Parsons Lecture Theatre

- 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.
-
- 20:00–22:00** **Opening Reception:**
Location: Pavillion Restaurant



Wednesday June 10th

- 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: Professor Don Barry, President, University of Limerick, Limerick, Ireland.
 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 Hu⁴, Rebecca Kuriyan⁶, Estelle Lambert⁷, Carol Maher⁸, Jose Maia⁹, Victor Matsudo¹⁰, Timothy Olds⁸, Vincent Onywera¹¹, Anura Kurpad⁶, Olga Sarmiento¹², Martyn Standage¹³, Mark Tremblay³, 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, ¹¹Kenya 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
¹School of Health Sciences, University of Salford, Manchester, UK, ²The University of Leeds, Leeds, UK.
- 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 Morris², S Goya Wannamethee¹, Steve Iliffe¹, Sarah Ash¹, Lucy Lennon¹, Peter Whincup⁴, Barbara Jefferis³
¹University College London Medical School, Hampstead Campus, London, UK, ²University of Bristol, Bristol, London, ³St George's University, London, UK.

- 10:15–10:30** **Coffee Break:**
Location: Main Exhibition Hall (EG0-10)
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- 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.
 Kong Chen, National Institute of Diabetes and Digestive and Kidney Disease, USA
Introducer: Mark Lyons, University of Limerick, Limerick, Ireland.
-
- 13:15–14:30** **Lunch:**
Location: Red Raisin Café
-
- 14:30–16:00** **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.
-
- 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 Hubble-Kozey¹
¹Dalhousie University, Halifax, Nova Scotia, Canada, ²National Cancer Institute, Maryland, USA.
- 14:45–15:00** **03.2 Older people who feel fatigue have restricted ability to accumulate physical activity**
Thorlene Egerton¹, Dorte 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 Teuffl¹, 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 Fritsch¹, 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.
- 15:15–15:30** **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.
- 15:30–15:45** **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.
- 15:45–16:00** **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)
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- 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)
KS-2: Kamiar Aminian, Institute of Bioengineering, Ecole Polytechnique Fédérale de Lausanne (EPFL)
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)
Title: **Formation of the International Society for the Measurement of Physical Behaviour.**
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 June 11th

- 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 Chastin¹, Javier Palarea-Albaladejo²
¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²Biomathematics 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 Taylor¹, Sheila Williams¹, Victoria Farmer¹, Barry Taylor¹
¹University 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-Jones¹, Sheila Williams¹, Barbara Galland¹, Gavin Kennedy¹, Rachael Taylor¹
¹University 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**
Martiin 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

National 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, ⁵Aceo, Swedish ICT AB, Sensor Systems Department, Kista, Sweden, ⁶Spring techno GmbH & Co. KG, Hermann-Köhl-Str. 7, 28199, T.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)

10:30–11:45 Exhibitor Talks:

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

Location: Jean Monnet Theatre (DG-016)

11:45–13:00 Poster Session 3:

Location: Main Exhibition Hall (EG0-10)

13:00–14:00 Lunch:

Location: Red Raisin Cafe

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 Biswas², Karin Pfeiffer²

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

¹KU 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 Giniš², 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.

14:30–14:45 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.

14:45–15:00 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.

15:00–15:15 Coffee Break:

Location: Main Exhibition Hall (EG0-10)

15:15–16:30 Poster Session 4:

Location: Main Exhibition Hall (EG0-10)

16:30–17:30 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.

19:00–23:00 Conference Banquet:

Location: Strand Hotel, Limerick City Centre.

Friday June 12th

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.

S-5: Free-Living Assessment of Wearable Sensor Data Processing Methods.

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 Eslinger, 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'.*
Chair: Kieran Dowd, University of Limerick, Limerick, Ireland.

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 Kheirkhanian¹, Marco Pahor¹, Sanjay Ranka¹
¹University of Florida, Gainesville, Florida, USA, ²Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA, ³Southern Connecticut State University, New Haven, Connecticut, USA, ⁴Arizona State University, Phoenix, Arizona, USA, ⁵Tufts University, Massachusetts, USA, ⁶Wake Forest School of Medicine, North Carolina, USA, ⁷University of Maryland, Maryland, USA, ⁸Stanford University School of Medicine, Stanford, California, USA, ⁹Boston University, Massachusetts, USA, ¹⁰Northwestern University, Illinois, USA.

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, Brigid Lynch², Genevieve Healy¹, Natasha Reid¹, Bronwyn Clark¹, David Dunstan³, Neville Owen³
The 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.

Wednesday June 10th

10:30–11:45 Poster Session 1:

PS1.1 Association between physical activity and affective reactions in every-day life: Ambulatory Assessment with activity-triggered e-diaryMartina Kanning¹, Ulrich Ebner-Priemer², Wolfgang Schlicht¹¹University of Stuttgart, Stuttgart, Germany, ²Central Institute of Mental Health, University of Heidelberg, Heidelberg, Baden-Württemberg, Germany.**PS1.2 A comparison of wrist and hip accelerometer counts to measured total daily physical activity energy expenditure**Whitney Welch¹, Scott Strath¹, David Bassett², Nora Miller¹, Ann Swartz¹¹University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA, ²University of Tennessee, Knoxville, Tennessee, USA.**PS1.3 Real Time Physical Activity Detection using a Single Waist Mounted Tri-Axial Accelerometer Sensor**Alan Bourke¹, Gearoid ÓLaighin², John Nelson³, EAF Ihlen¹, Jorunn Helbostad¹¹Norwegian University of Science and Technology, Trondheim, Norway, ²National University of Ireland Galway, Galway, Ireland, ³University of Limerick, Limerick, Ireland.**PS1.4 Step detection accuracy in multiple sclerosis: patient-specific error propagation in long-term monitoring of physical activity**Fabio Storm¹, Sivaraman Nair², Alison Clarke³, Jill Van der Meulen⁴, Claudia Mazzà⁵¹University of Sheffield, Sheffield, South Yorkshire, England, UK, ²Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK, ³Northern General Hospital, Sheffield, South Yorkshire, England, UK, ⁴Royal Hallamshire Hospital, Sheffield, South Yorkshire, England, UK, ⁵The University of Sheffield, Sheffield, South Yorkshire, England, UK.**PS1.5 Quantifying the cadence of free-living walking using event-based analysis**Malcolm Granat¹, Clare Clarke², Ben Stansfield³, Philippa Dall³¹University of Salford, Manchester, England, UK, ²University of Dundee, Dundee, Scotland, UK, ³Glasgow Caledonian University, Glasgow, Scotland, UK.**PS1.6 When they do and when they don't: Daily patterns of physical activity in adolescent youth.**Sarahjane Belton¹, Johann Issartel¹, Bronagh McGrane¹, Danielle Powell¹, Wesley O'Brien¹¹Dublin City University, Dublin, Ireland.**PS1.7 An examination of the accuracy and reliability of three GPS devices**Cormac Powell¹, Alan Donnelly¹, Mark Lyons¹, Ross Anderson¹¹Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland.**PS1.8 Thirteen years secular trend reveals a dramatic drop in recommended daily physical activity in Swedish boys: a smartphone effect?**Anders Raustorp¹, Peter Pagels², Andreas Fröberg¹, Cecilia Boldemann³¹University of Gothenburg, Gothenburg, Sweden, ²Linnaeus University, Kalmar, Sweden, ³Karolinska Institutet, Solna, Sweden.**PS1.9 Association between Smartphone-based long-term Monitoring Outcomes and Traditional Clinical Assessment Tools in Community-Dwelling Older People**Sabato Mellone¹, Marco Colpo², Stefania Bandinelli², Lorenzo Chiari¹¹University of Bologna, Bologna, Italy, ²Azienda Sanitaria Firenze, Florence, Italy.**PS1.10 Effect of physical education class on moderate-to-vigorous physical activity in elementary schools in Qatar**Fuad Almudahka¹, Lena Zimmo¹, Abdulaziz Farooq¹, Izzeldin Ibrahim¹, Mohamed Alkuwari¹¹ASPETAR- Orthopaedic and Sports Medicine Hospital, Doha, Qatar.**PS1.11 Association of Objectively Measured Physical Activity with Vascular Endothelial Function in Male Adolescents**Sinead Sheridan¹, Niall Moyna²¹Dublin City University, Dublin, Ireland.**PS1.12 Physical activity and sedentary behaviour of ethnically diverse young adults (DASH)**Philippa Dall¹, Ben Stanfield¹, Oarabile Molaodi², Seeromanie Harding¹¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²Glasgow University, Glasgow, Scotland, UK.**PS1.13 Posture sensor as feedback when lifting weights**Per Hellstrom¹, Anna Akerberg¹, Mia Folke¹¹Malardalen University (MDH), Västerås, Sweden.**PS1.14 Comparison of accelerometer cut-points for determining MVPA in adolescent girls**Elaine Murtagh¹, Angela Carlin², Marie Murphy², Alison Gallagher²¹Mary Immaculate College, University of Limerick, Limerick, Ireland, ²University of Ulster, Jordanstown, Antrim, Northern Ireland.**PS1.15 Sources of measurement error in a longitudinal lifestyle intervention trial**Juned Siddique¹¹Northwestern University, Illinois, USA.**PS1.16 Dance for people with Parkinson's disease: what is the evidence telling us?**Amanda Clifford¹, Joanne Shanahan¹, Meg Morris², Orfhlaith Ni Bhriain¹, Jean Saunders¹¹Department of Physiotherapy, University of Limerick, Limerick, Ireland, ²La Trobe University, Melbourne, Victoria, Australia.**PS1.17 Steps measured in relation to different amount of physical activity**Anna Åkerberg¹, Mia Folke¹, Maria Lindén¹¹Malardalen University, Västerås, Sweden.**PS1.18 QR-codes as a tool to increase physical activity level among school children during class hours**Jeanette Christensen¹, Allan Kristensen¹, Thomas Bredahl¹¹University of Southern Denmark, Odense, Denmark.**PS1.19 Monitoring of physical activity of the participants in a sports extension course**Masami Miyazaki¹, Takeshi Sato², Eiji Watanabe³, Kazuyoshi Seki¹, Takayuki Watanabe⁴¹Waseda University, Shinjuku, Tokyo, Japan, ²Jissen Women's University, Hino, Tokyo, Japan, ³Senshu University School of Commerce, Chiyoda, Tokyo, Japan, ⁴Hachinohe Gakuin University, Hachinohe, Aomori, Japan.**PS1.20 Objective and subjective measures of physical activity: A comparison between Ecological Momentary Assessment and Accelerometer measures**Lars Pieper¹, John Venz¹, Jana Hoyer¹, Catharina Voss¹, Katja Beesdo-Baum¹¹Technische Universität Dresden, Dresden, Germany.**PS1.21 The merit of an individual calibration: estimating physical activity energy expenditure in wheelchair users**Tom Nightingale¹, Jean-Philippe Walhin¹, Dylan Thompson¹, James Bilzon¹¹University of Bath, Bath, England, UK.**PS1.22 Instantaneous walking speed estimation for daily life activity monitoring based on wrist acceleration**Benedikt Fasel¹, Farzin Dadashi¹, Kamiar Aminian¹¹Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.

PS1.23 Postural recognition in stroke and healthy using a trunk-worn inertial and barometric pressure sensor

Rebekka Anker¹, Ruth Turk², Claire Ingham², Jane Burridge², Kamiar Aminian¹

¹Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, ²University of Southampton, Southampton, England, UK.

PS1.24 Concurrent Validity of Wrist Worn Accelerometers in Preschool Children

Jane Hislop¹, Nicole Palmer¹, Priya Anand¹, Tara Aldin², Jaclyn Clark¹

¹Queen Margaret University, Edinburgh, Scotland, UK, ²NHS Lothian, Edinburgh, Scotland, UK.

PS1.25 Validation of Health Examinees Cohort Study Physical Activity Questionnaire in Korea: a pilot study

Ji-Yeob Choi¹, Miyoung Lee², Hyo-Joo Lee¹, Jung-Min Lee³, Yeon Jung Kim⁴, Daehee Kang¹, Jong-koo Lee¹

¹Seoul National University, Seoul, South Korea, ²Kookmin University, Seoul, South Korea, ³University of Nebraska Omaha, Nebraska, USA ⁴Korea Centers for Disease Control & Prevention, South Korea.

PS1.26 Validation of the activity monitor Activ8: energy expenditure during walking and running

Joost Oomen¹, Dennis Arts¹, Steven Vos¹

¹Fontys University of Applied Sciences, Eindhoven, Netherlands

PS1.27 Calibration of Accelerometer and Self-Reported Measures of Physical Activity Using Biomarker data in the Hispanic Community Health Study/Study of Latinos (HCHS/SOL)

Pamela Shaw¹, Robert McMurray², Nancy Butte³, Daniela Sotres-Alvarez², Hengrui Sun², Mark Stoutenberg⁴, Kelly Evenson², Ashley Moncrieff⁵, Lisa Sanchez-Johnsen⁶, Mercedes Carnethon⁷, Elva Arredondo⁸, Charles Matthews⁹, Yasmin Mossavar-Rahmani¹⁰

¹University of Pennsylvania, Philadelphia, USA, ²University of North Carolina at Chapel Hill, North Carolina, USA, ³Baylor College of Medicine, Houston, Texas, USA, ⁴University of Miami Miller School of Medicine, Miami, Florida, USA, ⁵University of Miami, Miami, Florida, USA, ⁶University of Illinois at Chicago, Chicago, Illinois, USA, ⁷Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA, ⁸San Diego State University, San Diego, California, USA, ⁹National Cancer Institute, Maryland, USA ¹⁰Albert Einstein College of Medicine, New York, USA.

PS1.28 Differential actigraphy for monitoring asymmetry in motor behavior: accuracy and test-retest reliability

Marco Rabuffetti¹, Paolo Meriggi², Chiara Pagliari³, Paolo Bartolomeo⁴, Maurizio Ferrarin²

¹Fondazione Don Carlo Gnocchi Onlus, ²IRCCS Don Carlo Gnocchi Foundation, ³Catholic University, ⁴INSERM, France & Catholic University, Italy.

PS1.29 Equivalence of the activPAL3 and activPAL in measuring physical activity

Ben Stansfield¹, Ceri Sellers¹, Margaret Grant¹

¹Glasgow Caledonian University, Glasgow, Scotland, UK.

PS1.30 Comparison of Raw Accelerometry Output from Commercial Devices; Importance of Body Position and Gait Velocity.

Michelle Norris¹, Kieran Dowd¹, Ian Kenny¹, Alan Donnelly¹, Ross Anderson¹

¹Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland.

PS1.31 Criterion validity and calibration of the GENEActiv accelerometer in adults.

Christina Dillon¹, Cormac Powell², Kieran Dowd², Brian Carson², Alan Donnelly²

¹University College Cork, Cork, Ireland, ²University of Limerick, Limerick, Ireland.

PS1.32 Validity of a New Motion Sensor Under Free-Living Conditions

Fernanda Faria¹, Paulo Amorim²

¹Santa Catarina State University, Florianópolis, Santa Catarina, Brazil ²Federal University of Viçosa, Viçosa, Minas Gerais, Brazil.

PS1.33 Free-living validation of consumer-based activity trackers as measures of physical activity and sedentary behaviour: Jawbone UP and Fitbit One

Sjaan Gomersall¹, Norman Ng¹, Toby Pavey¹, Wendy Brown¹

¹The University of Queensland, Queensland, Australia

PS1.34 Body acceleration as indicator for walking economy in an ageing population

Giulio Valenti¹, Alberto Bonomi², Klaas Westerterp¹

¹Maastricht University, Maastricht, Limburg, Netherlands, ²Philips Research Laboratories, Eindhoven, Netherlands.

PS1.35 Ecological Validity of a Random Forest Activity Classifier for Wrist-Mounted Accelerometer Data

Stewart Trost¹, Toby Pavey², Sjaan Gomersall², Bronwyn Clark²

¹Queensland University of Technology, Queensland, Australia ²University of Queensland, Queensland, Australia.

PS1.36 Calibration of the ActiGraph GT3X+ accelerometer for the estimation of physical activity intensity in children with intellectual disabilities

Arlene McGarty¹, Victoria Penpraze¹, Craig Melville¹

¹University of Glasgow, Glasgow, Scotland, UK.

PS1.37 Comparison of hip and low back worn Axivity AX3 and GT3X+ activity monitors

Jan Brønd¹, Niels Møller¹, Daniel Arvidsson¹

¹University of Southern Denmark, Odense, Denmark.

PS1.38 An Evaluation of the Clock Drift Phenomenon with the ActiGraph Accelerometer"

John Schuna¹, Tiago Barreira², Catrine Tudor-Locke³

¹Oregon State University, Portland, Oregon, USA, ²Syracuse University, New York, USA, ³Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA.

PS1.39 Factors associated with consent and withdrawal in an accelerometer-based study conducted among breast cancer survivors

Terry Boyle¹, Jeff Vallance², Emily Ransom³, Brigid Lynch⁴

¹BC Cancer Agency, Vancouver, British Columbia, Canada, ²Athabasca University, Athabasca, Alberta, USA, ³The University of Western Australia, Crawley, Western Australia, Australia, ⁴Cancer Council Victoria, Melbourne, Victoria, Australia

PS1.40 Physical activity levels and patterns in Chinese one-year-old children, an Early STOPP China study.

Maria Hagstromer¹, Hong Mei², Elin Johansson¹, Yuelin Xiong², Lanlan Zhang², Jianduan Zhang², Claude Marcus¹

¹Karolinska Institutet, Solna, Sweden, ²Huazhong University of Science and Technology, Tongji Medical College, Wuhan, Hubei, China.

PS1.41 Accelerometer Based School Aged Children's Physical Activity Variability Patterns: a longitudinal Analysis during Schooldays

Xia Li¹, Patricia Kearney¹, Eimear Kearney¹, Janas Harrington¹, Tony Fitzgerald¹

¹University College Cork, Cork, Ireland.

PS1.42 Bike-train measurement study: Measuring physical activity in children with accelerometers, GPS and machine-learned classifiers

Katherine Ellis¹, Jacqueline Kerr¹, Suneeta Godbole¹, Eileen Johnson¹, Gert Lanckriet¹

¹UC San Diego, San Diego, California, USA.

PS1.43 Activity monitoring as an outcome measure in total knee arthroplasty: Reference data and comparison with healthy controls.

BPL Grimm¹, Sonia Ahmadinezhad², Matthijs Lipperts³, Rachel Senden¹, Ide Heyligers¹

¹AHORSE Foundation, Atrium-Orbis Medical Center, Heerlen, Netherlands, ²Zuyd University of Applied Science, Heerlen, Netherlands ³St. Anna Hospital, Herne, Germany.

Wednesday June 10th

16:15–17:30

Poster Session 2:

PS2.1 A comparison of the activPAL and ActiGraph thigh and waist inclinometer functions for identifying lying, sitting and upright postures

Charlotte Edwardson¹, Sarah Bunnewell¹, James Sanders², Tom Yates¹

¹Leicester Diabetes Centre, University of Leicester, Leicester, UK, ²Loughborough University, Leicestershire, England, UK.

PS2.2 Feature selection vs. Principal Component Analysis in multi-sensor estimation of energy expenditure

Edward Sazonov¹, Kate Lyden², Edward Melanson²

¹The University of Alabama, Tuscaloosa, Alabama, USA, ²The University of Colorado, Boulder, Colorado, USA.

PS2.3 Automated identification of waking wear time from continuously worn activPAL3 data: a SAS tool

Elisabeth Winkler¹, Genievia Healy¹, Sebastien Chastin², Bodicoat Danielle³, Edwardson Charlotte³, Kishan Bakrania³, David Dunstan⁴, Neville Owen⁴

¹The University of Queensland, Queensland, Australia, ²Glasgow Caledonian University, Glasgow, Scotland, UK, ³University of Leicester, Leicestershire, England, UK, ⁴Baker IDI Heart and Diabetes Institute, Melbourne, Victoria, Australia.

PS2.4 Associations of Daily Weather Conditions with Accelerometer-Measured Physical Activity during School Days among Children

Xia Li¹, Patricia Kearney¹, Eimear Kearney¹, Janas Harrington¹, Tony Fitzgerald¹

¹University College Cork, Cork, Ireland.

PS2.5 An interactive MATLAB GUI tool for graphical exploration of raw accelerometry data

Jaroslav Harezlak¹, Marcin Straczek², Jacek Urbanek³

¹Indiana University RM Fairbanks School of Public Health, Indianapolis, USA, ²AGH University of Science and Technology, Kraków, Poland, ³Johns Hopkins Bloomberg School of Public Health, Maryland, USA.

PS2.6 Sampling frequency of accelerometer data collection affects the activity counts generated from the ActiLife Data Analysis Software

Jan Brønd¹, Daniel Arvidsson¹

¹University of Southern Denmark, Odense, Denmark.

PS2.7 Assessing velocity ranges using global positioning system data analysis in children: a new definition of sprinting in children

Georges Baquet¹, Abd-Elbasset Abaïdia², Gregory Dupont³

¹Université de Lille, Lille, France, ²Université de Lille and Lille Olympique Sporting Club, Lille, France, ³Lille Olympique Sporting Club, Lille, France.

PS2.8 Effect of Wavelet and Scale on Accelerometer-Based Postural Transition Detection

Aodhán Hickey¹, Brook Galna¹, John Mathers¹, Lynn Rochester¹, Alan Godfrey¹

¹Newcastle University, Newcastle, England, UK.

PS2.9 Method for Accelerometry-Based Detection and Identification of Walking in Observational Studies

Jacek Urbanek¹, Vadim Zipunnikov¹, Tamara Harris², Nancy Glynn³, Jaroslav Harezlak⁴, Ciprian Crainiceanu¹

¹Johns Hopkins Bloomberg School of Public Health, Maryland, USA, ²National Institute on Aging, Bethesda, Maryland, USA, ³University of Pittsburgh, Pittsburgh, Pennsylvania, USA, ⁴Indiana University Fairbanks School of Public Health, Indianapolis, USA.

PS2.10 Automatic Pattern Recognition of Functional Upper-Limb Activities Using Hidden Markov Models

Arturo Vega-Gonzalez¹, Sergio Parra-Sanchez¹, Juan Manuel Gomez-Gonzalez³, Irais Quintero-Ortega¹, Birzabith Mendoza-Novelo¹, Mayra Cuellar-Cruz¹, Jorge Delgado-García¹

¹Universidad de Guanajuato, División de Ciencias e Ingenierías, Leon, Mexico, ²Universidad Nacional Autónoma de México, Mexico City, Mexico.

PS2.11 Developing and validating generalizable intensity-based thresholds on raw accelerometer data for sedentary behaviour and light activity discrimination - a MAD approach

Kishan Bakrania¹, Thomas Yates¹, Charlotte Edwardson¹

¹University of Leicester, Leicester, Leicestershire, England, UK.

PS2.12 Variability of Estimating Physical Activity Levels Employing Different Prediction Equations and Epoch Lengths Utilizing Actigraph GT3X in Children

Miyoung Lee¹, Jung-Hwan Cho², Muncheong Choi¹, Jiye Min¹, Kwanghee Lee¹, Jaemyung Kim¹

¹Kookmin University, Seoul, South Korea, ²Seoul Womens University, Seoul, South Korea.

PS2.13 Functional Statistical Approaches for Actigraphy Data

Vadim Zipunnikov¹

¹Johns Hopkins Bloomberg School of Public Health, Maryland, USA.

PS2.14 Continuous monitoring of turning and its relation to Parkinson's disease

Martina Mancini¹, Aner Weiss², Talia Herman², Fay Horak¹, Jeffrey Hausdorff²

¹Oregon Health & Science University, Portland, Oregon, USA, ²Tel Aviv Sourasky Medical Center, Tel Aviv, Israel.

PS2.15 Knee Joint Angles and Spatio-Temporal Parameters Estimated via Wearable Inertial Sensors

Salvatore Tedesco¹, Andrea Urru¹, Michael Walsh¹, Brendan O'Flynn¹, Danilo Demarchi²

¹Tyndall National Institute, University College Cork, Cork, Ireland, ²Politecnico Torino, Torino, Italy.

PS2.16 Cross-sectional analysis of weekly levels and patterns of objectively measured physical behaviour with cardiometabolic health in middle-aged adults

Christina Dillon¹, Catherine Phillips¹, Darren Dahly¹, Alan Donnelly², Patricia Kearney¹, Ivan Perry¹, Xia Li¹, Kirsten Rennie³

¹University College Cork, Cork, Ireland, ²University of Limerick, Limerick, Ireland, ³University of Hertfordshire, Hertfordshire, England, United Kingdom.

PS2.17 Simulation of accelerometer data reduction choices on sample size and select physical activity and sedentary outcomes in older adults

Scott Strath¹, Young Cho¹, Hotaka Maeda¹, Taylor Rowley¹, Nora Miller¹, Jeremy Steeves¹, Ann Swartz¹

¹University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA.

PS2.18 A Comparison of Two Methods for Applying Cut-Points to 1-Sec Count Data From Hip and Wrist-Worn Actigraphs Using the Enformia Informatics Platform

Amanda Hickey¹, Albert Mendoza¹, Duane Jung², John Staudenmayer¹, Evan Ray¹, Patty Freedson¹

¹University of Massachusetts, Massachusetts, USA, ²Enformia Inc., Huntersville, North Carolina, USA.

PS2.19 A comparison of wrist and hip accelerometers for free-living behavior classification

Katherine Ellis¹, Jacqueline Kerr¹, Suneeta Godbole¹, Eileen Johnson¹, Gert Lanckriet¹

¹UC San Diego, San Diego, California, USA.

PS2.20 Does excluding the first day of accelerometry monitoring matter?

Anna Timperio¹, Nicola Ridgers¹, Catherine Cash¹, Karen Lamb¹, Jo Salmon¹

¹Deakin University, Melbourne, Victoria, Australia.

PS2.21 A taxonomy of physical behaviour data for monitoring technology

Sebastien Chastin¹, Alan Bourke², Espen F. Ihlen², Jorunn L. Helbostad²

¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²Norwegian University of Science and Technology, Trondheim, Norway

PS2.22 Experience sampling and physical activity measurements to improve workday satisfaction

Simone Boerema¹, Mirka Evers¹, Miriam Cabrita¹, Miriam Vollenbroek¹, Hermie Hermens²

¹Roessingh Research and Development, Enschede, Netherlands ²University of Twente, Enschede, Netherlands.

PS2.23 Behavioral periodicity detection from 24h waveform wrist accelerometry

Matthew Buman¹, Feiyan Hu², Eamonn Newman², Alan Smeaton², Dana Epstein³

¹Arizona State University, Phoenix, Arizona, USA ²Dublin City University, Dublin, Ireland, ³Phoenix Veteran Affairs Health Care System, Phoenix, Arizona, USA

PS2.24 Adherence to a 6-month multicomponent physical activation intervention in young men

Riikka Ahola¹, Maarit Kangas¹, Lauri Tuovinen¹, Pekka Siirtola¹, Riitta Pyky², Anna-Maiju Jauho¹, Jaakko Tornberg², Matti Mäntysaari³, Juha Röning¹, Timo Jämsä¹, Raija Korpelainen²

¹University of Oulu, Oulu, Finland, ²Oulu Deaconess Institute, Oulu, Finland, ³Center for Military Medicine, Finnish Defense Forces, Helsinki, Finland.

PS2.25 Effects of different Actilife software Wear Time Validation settings on data scoring in an intervention study of children with spastic cerebral palsy wearing Actigraphs

Emiel Sneekes¹, Fabiënne Schasfoort¹, Herwin Horemans¹, Johannes_Bussmann¹

¹Erasmus MC University Medical Centre, Rotterdam, Netherlands.

PS2.26 Bag of Words Model for Accelerometer Activity Classification

Scott Crouter¹, Kevin Amaral², Ping Chen², Wei Ding²

¹The University of Tennessee Knoxville, Knoxville, Tennessee, USA, ²University of Massachusetts Boston, Massachusetts, USA.

PS2.27 Measuring sedentary behaviour in people with back pain

Ciara Campbell¹, Daniel Kerr¹, Suzanne Mc Donough¹, Marie Murphy¹, Mark Tully²

¹Ulster University, Jordanstown, Co. Armagh, Northern Ireland, ²Queens University Belfast, Belfast, Co. Antrim, Northern Ireland.

PS2.28 Validity in young adults of automated detection of waking wear from hip-worn accelerometer data with a continuous wear protocol

Joanne McVeigh¹, Elisabeth Winkler², Genevieve Healy², James Slater³, Peter Eastwood³, Leon Straker¹

¹Curtin University, Bentley, Western Australia, Australia, ²The University of Queensland, Queensland, Australia, ³University of Western Australia, Western Australia, Australia.

PS2.29 An Objective Actigraphy Data Analysis Algorithm to Identify Novel Endpoints

Rebecca Spencer¹, Arnaud Moreau², Barry Peterson²

¹University of Massachusetts, Amherst, Massachusetts, USA, ²Philips Respirationics.

PS2.30 Comparison of the Heart Rate Readings between a Photoplethysmography device and Electrocardiography

Lay Khoo Lau¹, Alex Ong¹, Joseph Hamill², Hock Soon Seah³, Yiong Huak Chan⁴, Mallya Jagadish Ullal⁵, Denis Martin⁶, John Dixon⁶

¹Republic Polytechnic, Singapore, ²University of Massachusetts, Amherst, Massachusetts, USA, ³Nanyang Technological University, Singapore, ⁴National University of Singapore, Singapore, ⁵Khoo Teck Puat Hospital, Singapore, ⁶Teeside University, Newcastle, England, UK.

PS2.31 SenseWheel: Development of a device to measure everyday push styles of wheelchair users

Catherine Holloway¹, Andrew Symonds¹, Stephen Taylor¹, Michael Mentink¹, Peter Smitham¹, Tatsuto Suzuki¹

¹University College London, London, England, UK.

PS2.32 A survey of the technical capabilities of currently available commercial physical activity monitors

Ben Heller¹

¹Sheffield Hallam University, Sheffield, South Yorkshire, England, UK.

PS2.33 Interactive ambulatory assessment of physical activity in daily life

Jürgen Stumpp¹, Jörg Ottenbacher¹, Ulrich Großmann¹, Stefan Hey¹

¹Movisens GmbH, Karlsruhe, Germany.

PS2.34 (In)direct observation methods for physical activity behavior

Pedro Silva¹, Sérgio Soares², Jorge Mota¹, Paula Viana^{2,3}, Pedro Carvalho^{2,3}

¹CIAFEL, FADE-University of Porto, Porto, Portugal, ²Polytechnic of Porto - School of Engineering, Porto, Portugal, ³INESC TEC, Porto, Portugal.

PS2.35 The Assessment of Stride Frequency in Running using a Single Accelerometer

Robin Healy¹, Niamh Whelan¹, Ian Kenny¹, Andrew Harrison¹

¹Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland.

PS2.36 Optical Distance Measurement Sensors on the Shoes for Capturing the Gap Between Shoe and Floor

Kimio Oguchi¹, Tomoya Yamaguchi¹

¹Seikei University, Tokyo, Japan.

PS2.37 Stand-Up during working hours: The effectiveness of an (in-) activity triggered smartphone application

Jan-Philipp Lange¹, Martina Kanning¹

¹University of Stuttgart, Stuttgart, Germany.

PS2.38 Validation of a mobile app to measure sitting time and step counts

Judit Bort-Roig¹, Anna Puig-Ribera¹, Ruth Contreras¹, Joan Martori¹, James McKenna²

¹Universitat de Vic, Barcelona, Spain, ²Leeds Metropolitan University, Leeds, England, UK.



Thursday June 11th

11:45–13:00 Poster Session 3:

PS3.1 Characterizing physical activity and sedentary behavior change in response to a step goal

Ann Swartz¹, Michael Widlansky², Chi Cho¹, Nora Miller¹, Whitney Welch¹, Scott Strath¹

¹University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA, ²Medical College of Wisconsin Milwaukee, Wisconsin, USA.

PS3.2 Determinants of Prolonged Length of Stay and Functional Decline of Older Hospitalised Patients

Ruth McCullagh¹, Christina Dillon¹, N. Frances Horgan², Suzanne Timmons¹

¹University College Cork, Cork, Ireland, ²Royal College of Surgeons in Ireland, Dublin, Ireland.

PS3.3 Surgical procedure effect on short and long term post-surgery activity levels of total hip arthroplasty patients

Vassilios Vardaxis¹, Laura Covill¹, John Nettrour², Graig Mahoney¹

¹Des Moines University, Iowa, USA, ²Iowa Ortho, Iowa, USA.

PS3.4 Reallocation of sleep, sedentary, and active behaviors on waist circumference in breast cancer survivors: An isotemporal substitution analysis

Terry Boyle¹, Jeff Vallance², Matthew Buman³, Brigid Lynch⁴

¹BC Cancer Agency, Vancouver, British Columbia, Canada, ²Athabasca University, Athabasca, Alberta, USA, ³Arizona State University, Tempe, Arizona, USA, ⁴Cancer Council Victoria, Melbourne, Victoria, Australia

PS3.5 Sedentary behavior in chronic post stroke patients

Johannes Bussmann¹, Malou Fanchamps¹, Rita van den Berg-Emons¹

¹Erasmus MC University Medical Center, Rotterdam, Netherlands.

PS3.6 Changes in accelerometry measures following surgery for lumbar spinal stenosis related more to self-report outcomes than laboratory measures

Christy Tomkins-Lane¹, Matthew Smuck¹, Ming-Chih Kao¹, William Haskell¹, Matthew Buman², Agnes Ma¹

¹Stanford University, Stanford, California, USA, ²Arizona State University, Tempe, Arizona, USA.

PS3.7 Non-Hodgkin's lymphoma survivors' health-related quality of life and time spent in sleep, sedentary, and active behaviors: An application of the isotemporal substitution paradigm

Jeff Vallance¹, Brigid Lynch², Matthew Buman³, Terry Boyle⁴

¹Athabasca University, Alberta, Canada, ²Cancer Council Victoria, Melbourne, Victoria, Australia, ³Arizona State University, Tempe, Arizona, USA, ⁴British Columbia Cancer Agency, British Columbia, Canada.

PS3.8 A pedometer based motivational intervention to increase PA following total hip replacement

Ben Stansfield¹, Artaban Jeldi¹, David Allen², Angela Deakin², Margaret Grant¹, Malcolm Granat³, David McDonald²

¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²Golden Jubilee National Hospital, Clydebank, Dunbartonshire, UK, ³University of Salford, Manchester, England, UK.

PS3.9 Does the accelerometer improve compliance with recommended physical activity in obese children?

Marian Stelmach¹, Piotr Protas², Edyta Tenderenda-Banasiuk², Marta Pszczolkowska², Elzbieta Kuroczycka-Saniutycz², Anna Wasilewska²

¹Pope John Paul II State School of Higher Education in Biala Podlaska, Poland, ²Medical University of Bialystok, Bialystok, Poland.

PS3.10 Feasibility and pre-operative activity patterns in pancreatic and hepatobiliary cancer survivors undergoing surgical treatment

David Conroy¹, Andrea Murray², Niraj Gusani²

¹Northwestern University, Illinois, USA, ²Penn State Hershey Cancer Institute, Pennsylvania, USA.

PS3.11 How can commercially available physical activity monitors be used in therapy? Study design for the development of a decision aid

Kim van Vlijven¹, Susy Braun¹, Melanie Kleynen¹, Emmylou Beekman¹, Albine Moser¹, Raymond Swinkels¹, Anna Beurskens¹

¹Zuyd University of Applied Sciences, Heerlen, Netherlands.

PS3.12 An 8 week Targeted Functional Rehabilitation Intervention for the Treatment of Chronic Neck Pain; A Pilot Study

Cliona O'Riordan¹, John Nelson¹, Pepijn Van De Ven¹, Amanda Clifford¹

¹University of Limerick, Limerick, Ireland.

PS3.13 Head and trunk accelerations during gait as a measure of walking stability in Parkinson's disease?

Christopher Buckley¹, Lynn Rochester², Brook Galna¹, Claudia Mazzà¹

¹University of Sheffield, Sheffield, South Yorkshire, England, UK, ²Newcastle University, Newcastle, England, UK.

PS3.14 Using Smart Phone Data to detect fall risk

Laura Comber¹, Ailish Hannigan¹, Christopher McGuigan², Damien Meere¹, Pepijn Van de Ven¹, Susan Coote¹

¹University of Limerick, Limerick, Ireland, ²St Vincents University Hospital, Dublin, Ireland.

PS3.15 Choosing a criterion for a valid day of accelerometer monitoring in adults with mental illness

Justin Chapman¹, Wendy Brown¹, Nicola Burton¹

¹The University of Queensland, Queensland, Australia.

PS3.16 Exploring the relationship between motor and functional recovery in the first six months following right hemisphere stroke using a multilevel approach to data analysis

Stella Stein¹

¹Brunel University, Middlesex, England, UK.

PS3.17 Accelerometer vector magnitude cut-points for older adults with osteoporosis

Ing-Mari Dohrn¹, Agneta Ståhle¹, Maria Hagströmer¹

¹Karolinska Institutet, Solna, Sweden.

PS3.18 Accelerometer Cut Points for Physical Activity Assessment of Older Adults with Parkinson's Disease

Håkan Nero¹, Martin Benka Wallén¹, Erika Franzén¹, Agneta Ståhle¹, Maria Hagströmer¹

¹Karolinska Institutet, Solna, Sweden.

PS3.19 Validation of the ActivPAL Activity Monitor for Sedentary and Physical Activity Behavior in the Rheumatoid Arthritis population

Louise Larkin¹, Joanne Shanahan¹, Birgitta Nordgren², Charles Brand¹, Alexander Fraser¹, Norelee Kennedy¹

¹University of Limerick, Limerick, Ireland, ²Karolinska Institutet, Solna, Sweden.

PS3.20 Hesitation between sit to stand and walking is a measurable characteristic of free living mobility: A comparison of healthy and stroke populations

Daniel Rafferty¹, Malcolm Granat², Kristen Hollands², Andrew Kerr³

¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²University of Salford, Manchester, England, UK, ³University of Strathclyde, Glasgow, Scotland, UK.

PS3.21 Physical behavior among geriatric inpatients in relation to functional level

Kristin Taraldsen¹, Sigurd Evensen¹, Pernille Thingstad¹, Jorunn Helbostad¹, Ingvild Saltvedt², Helga Reklev³, Randi Granbo³, Olav Sletvold²

¹Norwegian University of Science and Technology, Trondheim, Norway, ²Norwegian University of Science and Technology, Trondheim, Norway and St.Olavs Hospital, Trondheim, Norway, ³St.Olavs Hospital, Trondheim, Norway.

PS3.22 A new effective model of exercise referral scheme in primary care to promote physical activity among inactive patients presenting with chronic conditions

Carme Martín-Borrás¹, Anna Puig-Ribera², Angela M^a Beltrán Hernández³, Elena Martínez Ramos⁴, Jordi Real Gatiús⁵, Mercè Solà Gonfaus⁶, Eva Castillo Ramos⁷, Ana Maria Guezala Bielsa⁶, Sandra Curto Sancho⁸, M^aJesús Valderas Sánchez⁹, Marta Prats Guardiola¹⁰, Arantxa Iturbide Zugasti¹¹, Jordi Martí Carbonell¹², Marta Villanueva Perez¹³, SEDESTACTIV Group¹⁴

¹FPCEE Blanquerna-URL, Barcelona, Spain, ²Universitat de Vic - Universitat Central de Catalunya, Barcelona, Spain, ³Lifestyles Study Group, RedIAPP, Institut Universitari d'Investigació en Atenció Primària Jordi Gol, Barcelona, Spain, ⁴Primary Healthcare Vilanova 1, ICS, Barcelona, Spain, ⁵Research Unit of Barcelona and Lleida, Primary Healthcare Research Institution IDIAP Jordi Gol, Barcelona, Spain, ⁶Primary Healthcare Centre Les Planes, Barcelona, Spain, ⁷Primary Healthcare Centre Santa Coloma de Cervelló, Barcelona, Spain, ⁸Primary Healthcare Centre Lluís Millet, ⁹Primary Healthcare Centre Carles Ribas, ¹⁰Primary Healthcare Centre Cornellà/ Lluís Millet, ¹¹Primary Healthcare Centre Passeig Sant Joan, ¹²Primary Healthcare Centre Vilanova 1, ¹³Primary Healthcare Centre Viladecans 2, ¹⁴Research Unit of Barcelona, Primary Healthcare Research Institution IDIAP Jordi Gol.

PS3.23 Development of tailored feedback strategies to improve effectiveness of mobile activity coaches

Reinoud Achterkamp¹, Miriam M. R. Vollenbroek-Hutten¹, Hermie Hermens¹

¹Roessingh Research and Development, Enschede, Netherlands

PS3.24 Directly measured physical activity and heart rate variability among workers with and without musculoskeletal disorders.

Eugene Lyskov¹, David Hallman¹, Svend Erik Mathiassen¹

¹University of Gävle, Gävle, Sweden.

PS3.25 Steps/day Screening Strategy and Thresholds for a Clinical Exercise Trial

Catrine Tudor-Locke¹, John Schuna¹, Damon Swift², Sandra Larrivee¹, Corby Martin¹, William Johnson¹, Timothy Church¹

¹Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA, ²East Carolina University, Greenville, North Carolina, USA.

PS3.26 Habitual activity levels of patients after total hip arthroplasty compared to healthy controls: Small difference in total levels but large in temporal event distribution.

Bernd Grimm¹, Rachel Senden¹, Matthijs Lipperts², Ide Heyligers¹

¹AHORSE Research Foundation, Atrium-Orbis Medical Center, Heerlen, Netherlands, ²Dept. Clinical Physics, St. Anna Hospital, Herne, Germany

PS3.27 Objectively measured physical activity and sedentary behaviour in older adults: diurnal patterns and their determinants

Claudio Sartini¹, S Goya Wannamethee¹, Steve Iliffe¹, Richard Morris¹, Sarah Ash¹, Lucy Lennon¹, Peter Whincup², Barbara Jefferis¹

¹University College London, London, England, UK, ²St George's University, London, England, UK.

PS3.28 Is there an association between objectively measured occupational sitting time and intense neck-shoulder pain among blue-collar workers?

David Hallman¹, Nidhi Gupta², Svend Erik Mathiassen¹, Andreas Holtermann²

¹University of Gävle, Gävle, Sweden, ²National Research Centre for the Working Environment, Copenhagen, Denmark.

PS3.29 Determining the context of sedentary behaviour in older adults using lifelogging body worn sensors (timelapse camera, activPAL).

Calum Leask¹, Juliet Harvey¹, Dawn Skelton¹, Sebastien F Chastin¹

¹Glasgow Caledonian University, Glasgow, Scotland, UK.

PS3.30 Comparison between a self-reported and objective measure of sedentary behaviour in persons post-stroke

Mona Aaslund¹, Bård Bogen¹, Rolf Moe-Nilssen¹

¹University of Bergen, Bergen, Norway

PS3.31 A feasibility study to reduce sedentary behaviour in frail older adults using activity monitors with real time and follow-up feedback

Juliet Harvey¹, Sebastien FM Chastin¹, Dawn Skelton¹

¹Glasgow Caledonian University, Glasgow, Scotland, UK.

PS3.32 Validity of the last 7-d sedentary behavior questionnaire (SIT-Q-7d) in cardiac rehabilitation (Phase II) setting

Borja del Pozo-Cruz¹, Romina Villamonte¹, Kyla Mc Ilwee²

¹University of Auckland, Auckland, New Zealand, ²California Polytechnic State University, California, USA.

PS3.33 A unified platform for outcome measures and exergames with 3D accelerometry

Martin Daumer¹, Timur Nuritdinow², Christian Lederer¹

¹SLC - The Human Motion Institute / Trium / TUM, Munich, Germany, ²SLC - The Human Motion Institute, Munich, Germany, ³SLC - The Human Motion Institute / TUM, Munich, Germany.

PS3.34 The Effect of Exercise on Postural Control in Older Men with Different Levels of Habitual Physical Activity

Robert Szekliński¹, Rafal Stemplewski¹

¹E. Piasecki University School of Physical Education

PS3.35 Dynamic balance performance is associated to physical activity level in Parkinson's disease

Maria Hagstromer¹, Hong Mei², Elin Johansson¹, Yuelin Xiong², Lanlan Zhang², Jianduan Zhang², Claude Marcus¹

¹Karolinska Institutet, Solna, Sweden, ²Huazhong University of Science and Technology, Tongji Medical College, Wuhan, Hubei, China.

PS3.36 UL Hospitals Falls Collaborative - A comparison of the FRASE to the Timed up and GO and the Impact of Cognitive Impairment on Falls Prevalence

Catherine Quinn¹, Doris Liddy¹, Chris Queally Fitzgerald¹, John G Devitt¹, Patricia Buckley¹, Mary Boland¹

¹HSE Mid-West-University of Limerick Hospitals- Ennis Hospital, Ireland.

PS3.37 Real-World Fall Temporal and Kinematic Variables for Fall Detection Algorithm Development for the L5 Location

Alan Bourke¹, Jochen Klenk², Lars Schwickert², Kamiar Aminian³, Espen Ihlen¹, Jorunn Helbostad¹, Lorenzo Chiari⁴, Clemens Becker²

¹Norwegian University of Science and Technology, Trondheim, Norway, ²Robert Bosch Hospital, Stuttgart, Germany, ³Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, ⁴University of Bologna, Bologna, Italy.

PS3.38 Targeting in-home monitoring to where and when people with Parkinson's Disease are most likely to fall

Emma Stack¹, Ann Ashburn¹, Veena Agarwal¹, Ting-Ray Lindley¹

¹University of Southampton, Southampton, England, UK.

PS3.39 Dual Task Gait Analysis in Frail and Mild Cognitive Impairment Patients

Alicia Martínez Ramírez¹, Ion Martinikorena Aranburu², Pablo Lecumberri Villamediana², Marisol Gomez Fernandez², Nora Millor Muruzabal², Mikel Izquierdo Redin²

¹Public University of Navarra, Navarra, Spain, ²Universidad Pública de Navarra, Navarra, Spain.

PS3.40 Attaching An Acceleration+Angular Sensor to Walking Stick for Human Fall Detection

Kimio Oguchi¹, Seidai Kitamura¹

¹Seikei University, Tokyo, Japan.

PS3.41 Assessment of Algorithm Performance During Variation of Sensor Location and Protocol

Naomi Hurwitz¹, Aodhán Hickey¹, John Mathers¹, Lynn Rochester¹, Alan Godfrey¹

¹Newcastle University, Newcastle, England, UK.

Thursday June 11th

15:15–16:30 Poster Session 4:

PS4.1 Differentiating lying down from sitting using a single activPAL3™ monitor: A pilot study

Philippa Dall¹, Kate Lyden², Dinesh John³, Malcolm Granat⁴

¹Glasgow Caledonian University, Glasgow, Scotland, UK, ²University of Colorado, Boulder, Colorado, United States, ³Northeastern University, Boston, Massachusetts, USA, ⁴Salford University, Manchester, England, UK.

PS4.2 More sedentary time is associated with slower walking speed, The Maastricht Study

Jeroen van der Velde¹, Hans Savelberg¹, Nicolaas Schaper², Julianne van der Berg¹, Coen Stehouwer², Paul Willems¹, Miranda Schram², Simone Sep², Carla van der Kallen², Ronald Henry², Pieter Dagnelie¹, Tineke van Geel¹, Annemarie Koster¹

¹Maastricht University, Maastricht, Limburg, Netherlands, ²Maastricht University Medical Centre+, Maastricht, Limburg, Netherlands

PS4.3 Measuring occupational sitting time, transitions and step counts in free living conditions of sedentary workplaces: Criterion validity of a mobile app

Anna Puig-Ribera¹, Judit Bort-Roig¹, Ruth Contreras¹, Joan Carles Martori¹, Jim McKenna²

¹Universitat de Vic-Universitat Central de Catalunya, Barcelona, Spain, ²Leeds Beckett University, Leeds, England, UK.

PS4.4 Measuring sedentary accumulation with non-postural accelerometers: potential biases from differential misclassification

Elisabeth Winkler¹, Genevieve Healy¹, Sebastien Chastin², Neville Owen³, David Dunstan³

¹The University of Queensland, Queensland, Australia, ²Glasgow Caledonian University, Glasgow, Scotland, UK, ³Baker IDI Heart and Diabetes Institute, Melbourne, Victoria, Australia.

PS4.5 Kids are not little adults: Evidence supporting a 2.0 MET threshold for sedentary behaviour in children

Pedro Saint-Maurice¹, Youngwon Kim¹, Gregory Welk¹, Glenn Gaesser²

¹Iowa State University, Iowa, USA, ²Arizona State University, Tempe, Arizona, USA.

PS4.6 Concurrent validity of energy monitoring and wearable cameras as measures of TV viewing: a pilot study

Adam Loveday¹, Lauren Sherar¹, Dale Eslinger¹

¹Loughborough University, Loughborough, Leicestershire, UK.

PS4.7 The Effects of Altering Sitting Behavior on Energy Expenditure and Muscle Activation

Nicholas Lerma¹, Scott Strath¹, Kevin Keenan¹, Bethany Forseth¹, Ann Swartz¹

¹University of Wisconsin-Milwaukee, Wisconsin, Milwaukee, USA.

PS4.8 Relationship of a comprehensive sedentary behaviour measure (SIT-Q) with activity energy expenditure assessed via doubly-labelled water

Brigid Lynch¹, Christine Friedenreich², Neville Owen³, David Dunstan³, Rémi Rabasa-Lhoret⁴, Farah Khandwala², Paula Robson², Ilona Csizmad²

¹Cancer Council Victoria, Melbourne, Victoria, Australia, ²Cancer Control Alberta, Alberta Health Services, Alberta, Canada, ³Baker IDI Heart and Diabetes Institute, Melbourne, Victoria, Australia, ⁴Université de Montréal, Montreal, Quebec, Canada.

PS4.9 Investigating the accuracy of the 24-hour recall method in assessing sedentary behavior: Physical Activity Measurement Survey (PAMS) project

Youngwon Kim¹, Gregory Welk¹

¹Iowa State University, Iowa, USA.

PS4.10 Correlation and agreement between a composite self-report measure and activPAL-derived sitting time: AusDiab 3

Elisabeth Winkler¹, Brigid Lynch², Bronwyn Clark¹, Paul Gardiner¹, Genevieve Healy¹, David Dunstan³, Neville Owen³

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

PS4.11 Validity and reliability of the accelerometer-determined sedentary time against activPAL in a sample of bus drivers

Veronica Varela Mato¹, Tom Yates¹, David Stensel¹, Stuart Biddle², Stacy Clemes¹

¹Loughborough University, Loughborough, Leicestershire, UK, ²Institute of Sport, Exercise & Active Living (ISEAL), Victoria University, Melbourne, Victoria, Australia.

PS4.12 Repurposing the LUMObac posture sensor as a sedentary behaviour self-monitor: A controlled validation study

James Sanders¹, Charlotte Edwardson², Sarah Bunnewell², Thomas Yates², Dale Eslinger²

¹Loughborough University, Leicestershire, England, UK, ²NIHR Leicester-Loughborough Diet, Lifestyle and Physical Activity Biomedical Research Unit, UK.

PS4.13 Validation of two physical activity questionnaires and an inactivity questionnaire with accelerometry

Kenn Konstabel¹, Triin Rääsk², Jarek Mäestu², Jaak Jürimäe²

¹National Institute for Health Development, Tallinn, Estonia, ²University of Tartu, Tartu, Estonia.

PS4.14 A comparison of young children's physical activity levels and sedentary time measured via Actical and ActiGraph accelerometers

Leigh Vanderloo¹, Patricia Tucker¹, Natascja D'Alimonte², Nicole Proudfoot², Brian Timmons²

¹University of Western Ontario, London, Ontario, Canada, ²McMaster University, Hamilton, Ontario, Canada.

PS4.15 Bidirectional associations between adiposity, sedentary behavior and physical activity: a longitudinal study in children

Chiaki Tanaka¹, Xanne Janssen², Mark Pearce³, Kathryn Parkinson³, Laura Basterfield³, Ashley Adamson³, John Reilly²

¹J. F. Oberlin University, Machida, Tokyo, Japan, ²University of Strathclyde, Glasgow, Scotland, UK, ³Newcastle University, Newcastle, England, UK.

PS4.16 Occupational physical activity and energetic work load of Finnish police officers

Jussi Kontinen¹, Janne Halonen¹, Harri Lindholm¹, Jorma Niemi², Sirpa Lusa¹

¹Finnish Institute of Occupational Health, Helsinki, Finland, ²The East-Uusimaa Police / University of Eastern Finland, Joensuu, Finland.

PS4.17 Quantifying Time Spent Sitting, Standing And Stepping At University With The Activpal Monitor

Arturo Vega-Gonzalez¹, Mayra Cuellar-Cruz², Juan Manuel Gomez-Gonzalez³, Irais Quintero-Ortega², Birzabith Mendoza-Novelo², Jorge Delgado-Garcia²

¹Universidad de Guanajuato, División de Ciencias e Ingenierías, ²Universidad de Guanajuato, Leon, Mexico, ³Universidad Nacional Autónoma de México, Mexico City, Mexico.

PS4.18 Classification of occupational activity categories using accelerometry: NHANES 2003-2004

Jeremy Steeves¹, Catrine Tudor-Locke², Rachel Murphy³, Scott Strath¹, George King⁴, Eugene Fitzhugh⁵, Tamara Harris³

¹University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, USA, ²Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA, ³National Institute on Aging, Maryland, USA, ⁴University of Texas at EL Paso, EL Paso, Texas, USA, ⁵University of Tennessee, Knoxville, Tennessee, USA.

PS4.19 Measuring sedentary behaviour and physical activity in truck drivers: Different approaches to data reduction

Toby Pavey¹, Stewart Trost¹, Nicholas Gilson¹

¹The University of Queensland, Queensland, Australia.

PS4.20 Daily physical activity and sedentary behavior patterning evaluated by triaxial accelerometer in Japanese adults

Shigeho Tanaka¹, Takafumi Ando¹, Tomoko Aoyama¹, Kazuko Ishikawa-Takata¹, Sho Nagayoshi²

¹National Institute of Health and Nutrition, Japan, ²Omron Healthcare Co. Ltd.

PS4.21 Comparison of accelerometer-based and self-reported level of physical activity and sitting time in young men

Riikka Ahola¹, Maisa Niemelä¹, Raija Korpelainen², Riitta Pyky², Anna-Majju Jauho¹, Lauri Tuovinen¹, Pekka Siirtola¹, Jaakko Tornberg², Matti Mäntysaari³, Sirkka Keinänen-Kiukaanniemi¹, Juha Röning¹, Timo Jämsä¹

¹University of Oulu, Oulu, Finland, ²Oulu Deaconess Institute, Oulu, Finland, ³Centre for Military Medicine, Finnish Defense Forces, Helsinki, Finland.

PS4.22 Comparison of Actigraph GT3X, Hookie AM20 and Polar Active physical activity measurement devices under free-living conditions

Anna-Majju Jauho¹, Janne Kulmala², Harto Hakonen², Henri Vähä-Ypyä³, Juha Auvinen¹, Raija Korpelainen⁴, Harri Sievänen⁵, Tuija Tammelin², Timo Jämsä⁵, Riikka Ahola⁵

¹University of Oulu, Oulu, Finland, ²LIKES - Research Center for Sport and Health Sciences, Jyväskylä, Finland, ³UKK Institute, Tampere, Finland, ⁴Oulu Deaconess Institute, Department of Sports and Exercise Medicine, Oulu, Finland, ⁵Medical Imaging, Physics and Technology (MIPT) consortium, University of Oulu, Oulu, Finland.

PS4.23 Association Between Body Mass Index and Objectively Measured Sitting Patterns at Work and During Leisure Among Blue-Collar Workers

Nidhi Gupta¹, David Hallman², Svend Erik Mathiassen², Mette Korshøj¹, Andreas Holtermann¹

¹National research centre for the working environment, Copenhagen, Denmark, ²University of Gävle, Gävle, Sweden.

PS4.24 Changes in Objectively Measured Physical Activity and Sedentary Behaviour In Adolescent Females Over A 12 Month Period.

Grainne Hayes¹, Kieran Dowd¹, Deirdre Harrington², Ailish Hannigan³, Helen Purtill⁴, Sarah Kelly⁵, Niall Moyna⁶, Clodagh O' Gorman³, Alan Donnelly¹

¹Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland, ²Leicester Diabetes Centre, University of Leicester, Leicester, UK, ³Graduate Entry Medical School, University of Limerick, Limerick, Ireland, ⁴Department of Mathematics and Statistics, University of Limerick, Limerick, Ireland, ⁵Institute of Technology Carlow, ⁶School of Health and Human Performance, Dublin City University, Dublin, Ireland.

PS4.25 Convergent validity of wrist acceleration and physical activity energy expenditure from combined heart-rate and movement sensing

Thomas White¹, Kate Westgate¹, Simon Griffin¹, Nick Wareham¹, Soren Brage¹

¹MRC Epidemiology Unit, Cambridge, UK.

PS4.26 Relevance of age, BMI, and movement detection threshold to accelerometer measures of walking energy expenditure in older women.

David Buchner¹, Chongzhi Di², Kelly Evenson³, Michael LaMonte⁴, I-Min Lee⁵, Eileen Rillamas-Sun², Marcia Stefanick⁶, Lesley Tinker², Yuzheng Zhang², Andrea LaCroix⁷

¹University of Illinois Urbana-Champaign, Illinois, USA, ²Fred Hutchinson Cancer Research Center, Seattle, Washington, USA, ³University of North Carolina, North Carolina, USA, ⁴University at Buffalo of The State University of New York, New York, USA, ⁵Harvard University, Cambridge, Massachusetts, USA, ⁶Stanford University, Stanford, California, USA, ⁷University of California San Diego, San Diego, California, USA.

PS4.27 Impact of Anatomical Placement of an Accelerometer on the Prediction of Physical Activity Energy Expenditure in Amputees.

Peter Ladlow¹, Tom Nightingale¹, Polly McGuigan¹, Alexander Bennett², Russ Coppack², James Bilzon¹

¹University of Bath, Bath, UK, ²Defence Medical Rehabilitation Centre, Leatherhead, Surrey, UK.

PS4.28 Quality sleep is associated with overnight metabolic rate in healthy elderly

Giulio Valenti¹, Alberto Bonomi², Klaas Westerterp¹

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PS4.29 Step/min Cut-points Based on Walking Do Not Predict Intensity of Non-Walking Activities

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PS4.30 Investigating the energetic cost of turning: influence of speed, angle and aerobic fitness

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¹Swansea University, Swansea, Wales, UK.

PS4.31 Energy Expenditure Estimation using the Accelerometer of the Smartphone

Joana Silva¹, Susana Carneiro¹, Bruno Aguiar¹, Tiago Rocha¹, Inês Sousa¹

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PS4.32 Distinguishing periods of wake during overnight sleep using the activPAL activity monitor

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PS4.33 Accelerometry + GPS: Assessment of Children's Free-Play Intensity and Location During Recess

Kimberly Clevenger¹, Gaurav Sinha¹, Brian Ragan², Matthew Jackson¹, Cheryl Howe¹

¹Ohio University, Athens, Ohio, USA, ²Middle Tennessee State University, Murfreesboro, Tennessee, USA.

PS4.34 Relating physical activity, pleasure, and daily satisfaction of older adults: a pilot study

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PS4.35 Influence of acute physical activity on blood pressure: Insights from continuous sensing

Andrew Kingsnorth¹, Dale Eslinger¹

¹Loughborough University, Loughborough, Leicestershire, England, UK.

PS4.36 Validation of the activPAL micro

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PS4.37 Who spent more time daily sitting? Analysis of sedentary behavior in primary healthcare patients who are overweight or mildly obese

Carme Martín-Borrás¹, Anna Puig-Ribera², Angela M^a Beltrán Hernández³, Elena Martínez Ramos⁴, Jordi Real Gatiús⁵, Mercè Solà Gonfaus⁶, Eva Castillo Ramos⁷, Ana Maria Guezala Bielsa⁶, Sandra Curto Sancho⁸, M^aJesús Valderas Sánchez⁹, Marta Prats Guardiola¹⁰, Arantxa Iturbide Zugasti¹¹, Jordi Martí Carbonell¹², Marta Villanueva Perez¹³, SEDESTACTIV Group¹⁴

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PS4.38 SmartStep: an Insole-Based Physical Activity Monitor

Edward Sazonov¹, Nagaraj Hegde¹, Edward Melanson¹

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PS4.39 Automatic car driving detection using raw accelerometry data

Jaroslav Harezlak¹, Marcin Straczek², Jacek Urbanek³

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NOTES

Lined area for writing notes on page 52.

NOTES

Lined area for writing notes on page 53.

PROGRAMME AT A GLANCE

Time	Tuesday 9-Jun	Wednesday 10-Jun	Thursday 11-Jun	Friday 12-Jun			
7:00	Delegate Arrival	Registration Open Room: Main Reception	Registration Open Main Reception	Free Time			
7:15							
7:30							
7:45							
8:00		Welcome: Jean Monnet	Invited Speakers Carol Torgan & Katrien Wijndaele Room: Jean Monnet		Oral Session 5 Room: Jonathan Swift	Oral Session 6 Room: Charles Parsons	
8:15		Keynote Speaker 1 Ulf Ekelund Room: Jean Monnet					
8:30							
8:45							
9:00					Keynote Speaker 3 James Levine Room: Jean Monnet	Symposium 4 Tiago Barreira Room: Jonathan Swift	Symposium 5 Aidan Doherty Room: Charles Parsons
9:15			Invited Speakers Rob Moti & Wiebren Zijlstra Room: Jean Monnet		Oral Session 1 Room: Jonathan Swift	Oral Session 2 Room: Charles Parsons	
9:30							
9:45							
10:00							
10:15		Coffee Break	Coffee Break	Coffee Break			
10:30							
10:45		Poster Session 1 Room: Main Exhibition Hall	Exhibitor Talks Room: Jean Monnet	Invited Speakers Dale Eslinger & Patty Freedson Room: Jean Monnet	Oral Session 9 Room: Jonathan Swift	Oral Session 10 Room: Charles Parsons	
11:00							
11:15							
11:30							
11:45							
12:00	Registration Open Room: Main Reception	Symposium 3 Host: Charles Matthews Room: Jonathan Swift	Poster Session 3 Room: Main Exhibition Hall	Keynote Speaker 5 Greg Welk Room: Jean Monnet			
12:15				Closing Ceremony: Room: Jean Monnet			
12:30							
12:45							
13:00							
13:15							
13:30			Lunch Location: Red Raisin Café	Lunch Location: Red Raisin Café	Free Time		
13:45							
14:00							
14:15		Pre-Congress Workshop 1A Host: Cas Ladha Room: Jonathan Swift	Pre-Congress Workshop 1B Host: David Loudon Room: Charles Parsons	Invited Speakers Claudia Mazza & James McLaughlin Room: Jean Monnet	Oral Session 7 Room: Jonathan Swift	Oral Session 8 Room: Charles Parsons	
14:30							
14:45							
15:00		Invited Speakers Jo Salmon, Nicky Ridgers and Stewart Trost Room: Jean Monnet	Oral Session 3 Room: Jonathan Swift	Oral Session 4 Room: Charles Parsons			
15:15							
15:30							
15:45							
16:00							
16:15	Pre-Congress Workshop 2A Host: Alan Godfrey Room: Jonathan Swift	Pre-Congress Workshop 2B Host: Lisa Chasan- Taber Room: Charles Parsons					
16:30							
16:45							
17:00							
17:15							
17:30							
17:45							
18:00		Keynote Speaker 2 Kamiar Aminian Room: Jean Monnet	Free Time	Optional Conference Excursion Location: Cliffs of Moher & Doolin			
18:15	Symposium 1 Host: Dale Eslinger Room: Jonathan Swift						
18:30	Symposium 2 Host: Maria Hagstromer Room: Charles Parsons						
18:45							
19:00		ISMPB General Assembly Room: Jean Monnet					
19:15							
19:30	Registration Open Room: Main Reception						
19:45							
20:00							
20:15							
20:30							
20:45							
21:00	Opening Reception Location: Pavillion Restaurant		Conference Banquet Location: Strand Hotel Limerick				
21:15							
21:30							
21:45							
22:00		Free Time		Free Time			