NEWSLETTER ISMPB | Issue 12



ISMPB

International Society for the Measurement of Physical Behaviour

Newsletter

July, 2019

www.ismpb.org

Message from the President

ICAMPAM 2019 was truly an outstanding success, both from the perspective of the scientific programme and from the many networking opportunities that were afforded by our broad range of social activities. This is perhaps highlighted from our "official" feedback from attendees where 90% rated the meeting as "good to excellent", and 87% said that the length was "just right". From my perspective, it seemed that all the sessions were very well attended, and there was a buzz and excitement throughout the meeting. Kenneth Myers and Guy Plasqui were fabulous hosts, who injected their own flavour and humour into the running of the conference.

Reflecting on the meeting, we can see that we are in a period of rapid growth in the use of real-world physical behaviour techniques. We need to consider, as a Society, how we can continue to support the broad range of these developments, provide a

vibrant forum for discussion and play a central role in driving forward the research in our I would also like to take exciting area of research.

To support our our General Management Meeting that we would be looking at increasing our off-year conference activities by having a physical meeting, webinars and Summer schools. We have now planned our first ISMPB workshop in Stockholm on 14th- 15th May 2020, "The physical behaviour 24/7 approach integrating occupational and public health perspectives". At the GMM, there was an interest from some members to organise a Summer School, and we look forward to seeing how we can take this forward.

The planning for the next ICAMPAM in 2021 has now begun, with Ed Melanson being our local host chair. The venue has now been booked, and Ed is helping to take the lead in ensurina that our next ICAMPAM lives up to and surpasses our expectations.

I would like to take this opportunity to welcome onto the Society's Board our two new members Martina Mancini (Oregon Health & Science University) and Karin Pfeiffer (Michigan State University). Both Martina and Karin bring to the

Board enthusiasm and new perspectives.

this opportunity to thank, personally and from the ambition, we announced at Board, our "retiring" Board member, Hans Bussmann. As you know it was Hans, who 11 years ago in 2008, who organised and ran the very first ICAMPAM. It is a tribute to Hans that we are now planning our 7th . ICAMPĂM. At the Maastricht banauet, the Board wanted to acknowledge and recognise this achievement and input, and we announced that the first keynote lecture, for future ICAMPAMs, will be known as the "Hans Bussmann lecture". Fortunately, Hans has promised to stay associated with the Board in an advisory capacity.

> I very much look forward to us, together, continuing to build and strengthen our Society.

> > Malcolm Granat



SOCIAL MEDIA

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http://www.ismpb.org/

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Member Profile

Kayla Nuss

Everybody has a unique career path to their current destination. Can you share some of your stops along the way?

I earned a Master's Degree in Higher Education Administration and Student Affairs from the University of Iowa and after working in Residence Life and Academic Advising, I realized that my side job of personal training and group fitness instruction was more fulfilling. I went back to school to earn my second MS degree in Health and Exercise Science from Colorado State University in May 2018 and am currently working on my doctorate degree, also from CSU, with Dr. Kaigang Li.

Tell us about a current project you are working on.

Our current project is to assess the accuracy of the Apple Watch series 4 and the Fitbit Inspire HR in individuals who use a prosthetic device due to a lower limb amputation.

What do you think are the most important research advancements in this area?

My personal interest is in commercially available wearable fitness trackers. As the number one fitness and health trend according to ACSM for the past several years, this area has incredible potential to impact the health of an increasingly sedentary population. However, continued research is required to determine how to improve the accuracy of these devices, as well as to uncover, as well as leverage, the mechanisms of the devices that positively impact physical activity behavior.



Have you participated in any ISMBP events? If so, can you please describe your experiences?

Yes! I attended ICAMPAM in Maastricht, Netherlands this June. It was an amazing experience to learn from the top experts in measurement, in such a magical city. I connected with researchers from around the globe and came back energized and inspired!

In the future, what would you like to see from the ISMPB?

I would love more opportunities to connect with other researchers in measurement through regional or even virtual meet-ups.

Kayla Nuss, MA, MS Kayla.Nuss@Colostate.edu

Human Performance Clinical Research Laboratory

Lab for the Assessment and Promotion of Physical Activity and Health

Journal for the Measurement of of Physical Behaviour Volume 2, Issue 2 is available online!!

Journal FOR THE Measurement OF Physical Behaviour Volume 1. ISSUE 1. MORTH 2017

Original Research

What is the Agreement Between Two Generations of Commercial Accelerometer in a Free-Living Environment for Young to Middle-Aged Adults?

Denise M. Jones, Harvi F. Hart, Kay M. Crossley, Ilana N. Ackerman, Joanne L. Kemp

Validation of the activPAL3 in Free-Living and Laboratory Scenarios for the Measurement of Physical Activity, Stepping, and Transitions in Older Adults

Alan K. Bourke, Espen A. F. Ihlen, Jorunn L. Helbostad

Validity and Reliability of a Novel Method for Physical Activity Surveillance in Toddlers
Aston K. McCullough, Carol Ewing Garber

Accuracy of Commercially Available Smartwatches in Assessing Energy Expenditure During Rest and Exercise

Zachary C. Pope, Nan Zeng, Xianxiong Li, Wenfeng Liu, Zan Gao

Comparison of Questionnaire and Device Measures of Physical Activity and Sedentary Behavior in a Multi-Ethnic Cohort of Older Women

Michael J. LaMonte, I-Min Lee, Eileen Rillamas-Sun, John Bellettiere, Kelly R. Evenson, David M. Buchner, Chongzhi Di, Cora E. Lewis, Dori E. Rosenberg, Marcia L. Stefanick, Andrea Z. LaCroix

Accelerometry-Based Prediction of Energy Expenditure in Preschoolers

Berit Steenbock, Marvin N. Wright, Norman Wirsik, Mirko Brandes

Identification of Apnea Events Using a Chest-Worn Monitor Compared to Laboratory-Based Polysomnography in Patients Suspected of Obstructive Sleep Apnea

Eduardo Salazar, Mayank Gupta, Meynard Toledo, Qiao Wang, Pavan Turaga, James M. Parish, Matthew P. Buman

Step Count and Sedentary Time Validation of Consumer Activity Trackers and a Pedometer in Free-Living Settings

Cubmit Manuscript to TMDP

Albert R. Mendoza, Kate Lyden, John Sirard, John Staudenmaye

Submit Manuscript to JMPB

Dominant vs. Non-Dominant Wrist Placement of Activity Monitors: Impact on Steps per Day

Susan Park, Lindsay P. Toth, Paul R. Hibbing, Cary M. Springer, Andrew S. Kaplan, Mckenzie D. Feyerabend, Scott E. Crouter, David R. Bassett

ICAMPAM 2019

The sixth International Conference on Ambulatory Monitoring of Physical Activity and Movement took place at the Maastricht Exhibition & Congress Center (MECC). 238 participants (71 students) enjoyed the remarkably warm weather in the Netherlands for an excellent program of posters, speakers and social events. Opening reception was conducted at the Maastricht City Hall located in the market square.

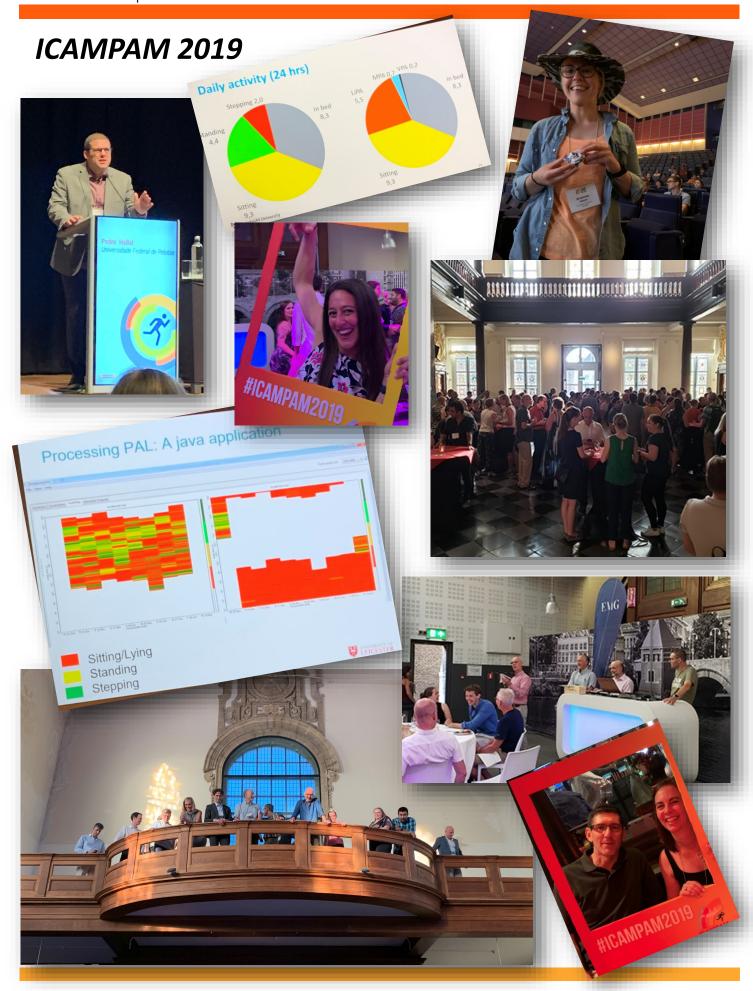




More than 40 members were present at the General Membership Meeting that took place on the 26th of June. The meeting agenda can be found on the ISMPB member's webpage and meeting minutes will be include in the next newsletter.

The social events were a success. The social dinner took place on the 27th of June in an old church and was representative of the informal and active community attending ICAMPAM. On the 26th of June, around 30 ECR's joined a bike tour around Maastricht (photo below). A local guide introduced the group to the historical marks of the city and to the vibrant international environment.





ICAMPAM 2019 Student Presentation Awards

Best Student Oral Presentations

- ⇒ 1st Place: Robert Marcotte, University of Massachusetts Amherst. Title: "Comparison of free-living activity classification between sojourns and epochs using wrist-worn accelerometers"
- ⇒ **Runner up:** Melker S. Johansson, University of Southern Denmark. Title: "Estimated effects of replacing sedentary time with walking on risk factors for coronary heart disease and stroke"

Best Student Poster Presentations

- ⇒ 1st Place: Nicholas Kuzik, University of Alberta. Title: "Compositional relationships between movement behaviours with cognitive and motor development in preschool-aged children"
- ⇒ **Runner up:** Lindsy Toth, University of Tennessee, Knoxville (not pictured). Title: "Confirmation of self-reported ambulatory exercise bouts during ecological momentary assessment"



Robert Marcotte

Melker S. Johansson

Nicholas Kuzik



COMMITTEES

Local Host Chairs:

Ed Melanson, University of Colorado Anschutz Medical Campus **Kate Lyden**, KAL Research and Consulting

Scientific Program Chair:

Jeff Hausdorff, Tel-Aviv Sourasky Medical Center

Local Organizing Committee:

Seth Creasy, University of Colorado Anschutz Medical Campus

Danielle Ostendorf, University of Colorado Anschutz Medical Campus

Jen Blankenship, University of Colorado Anschutz Medical Campus

Ann Caldwell, University of Colorado Anschutz Medical Campus

Key Dates

October	26	2020	Oral & Poster Abstracts call open
October	26	2020	Symposia Submissions Open
October	26	2020	Pre-Conference Workshop Open
December	11	2020	Symposia Submission Close
December	21	2020	Pre-Conference Workshop Close
January	26	2021	Registration open
January	26	2021	Poster Abstracts deadline
June	16-20	2021	ICAMPAM Conference





Save the dates: https://ismpb.org/icampam/

HANS BUSSMANN LECTURE ANNOUNCED

At ICAMPAM 2019, Hans Bussmann stepped down from the ISMPB board, but will remain connected to ISMPB in the role of past-president. As a recognition of the dedication and work of the ISMPB founder and past-president, ISMPB President, Malcolm Granat, announced during the social event that the first keynote of future ICAMPAM meetings will be now named the...

ure ICAMPAM meetings will be now named the...



Dept. of Rehabilitation Medicine, Erasmus MC – University Medical Center, Rotterdam, The Netherlands

NEW ISMPB BOARD ADDITIONS/CHANGES

Hans Bussmann Lecture

As part of the general meeting held at the conference, a few changes were made to the ISMPB board to reflect the membership votes. For information about all the current board members, please visit our website.

- Bronwyn Clark has assumed the role of vice-president.
- As mentioned above, Hans Bussmann has stepped down but will remain advisory as the past-president.
- Martina Mancini and Karin Pfeiffer were elected as new board members.
- Miriam Cabrita has now assumed the Chair of the Communications Committee and the co-editor of this newsletter.



Dr. Martina Mancini



Dr. Miriam Cabrita

Dr. Karin Pfeiffer

ISMPB Job Board

ISMPB now has a Job board on its website.

This is the ideal place to advertise job vacancies and research opportunities related to objective measurement and quantification of free-living physical behavior.

Access to the Job Board is free to ISMPB members.

For non-members the prices are as follows:

- \$150 for one job advertisement
- \$100 + VAT for each subsequent job.

https://ismpb.org/job-board/



Funding Opportunity!!

Recent US National Cancer Institute funding opportunity from the Small Business Innovation Research Program. The opportunity is titled "<u>Software for Automated Analysis of Images for Improved Cancer Health</u>" and it calls for the development of software to automatically extract information about human behavior and performance and free-living, as well as clinical settings.

Budget (total costs, per award):

- Phase I: up to \$400,000 for up to 9 months
- Phase II: up to \$2,000,000 for up to 2 years

We hope for proposals for tools that can measure walking speed and behavior in park and community settings as well as studies of changes in performance measures during aging or rehabilitation.

Proposal are due <u>October 23, 2019</u> and must be submitted by a small business. Typically such proposals also include subject matter experts, often from academic settings and many proposals come from businesses started by academics.

You can learn more about the call for proposals here - https://sbir.cancer.gov/funding/contracts/409

Pre-proposal informational webinar is scheduled for August 7 at 1:00 PM EDT. You can find details for each topic (e.g., summary, project goals, etc.) on the NCI SBIR website as well as a registration link for the webinar: https://sbir.cancer.gov/funding/contracts/currentcontracts.



What's new in the world of measurement? Look what our members have been up to.

JAMA Internal Medicine | Original Investigation

Association of Step Volume and Intensity With All-Cause Mortality in Older Women

I-Min Lee, MBBS, ScD; Eric J. Shiroma, ScD; Masamitsu Kamada, PhD; David R. Bassett, PhD; Charles E. Matthews, PhD; Julie E. Buring, ScD





Topics in Stroke Rehabilitation

ISSN: 1074-9357 (Print) 1945-5119 (Online) Journal homepage: https://www.tandfonline.com/loi/ytsr20

Identifying factors associated with sedentary time after stroke. Secondary analysis of pooled data from nine primary studies.

Wendy Hendrickx, Carlos Riveros, Torunn Askim, Johannes B.J. Bussmann, Michele L. Callisaya, Sebastien F.M. Chastin, Catherine M. Dean, Victor E. Ezeugwu, Taryn M. Jones, Suzanne S. Kuys, Niruthikha Mahendran, Trish J. Manns, Gillian Mead, Sarah A. Moore, Lorna Paul, Martijn F. Pisters, David H. Saunders, Dawn B. Simpson, Zoë Tieges, Olaf Verschuren & Coralie English

Estimating Sedentary Time from a Hip- and Wrist-worn Accelerometer

The Official Journal of the American College of Sports Medicine

Robert T Marcotte¹, Greg J Petrucci Jr¹, Melanna F Cox¹, Patty S Freedson John W Staudenmayer², John R Sirard¹

Energy Conservation Management for People
With Multiple Sclerosis-Related Fatigue: Who ^Lyan J. M. Blikman, Jetty van Meeteren, Jos W. R. Twisk, Fred A. J. de Laat, Vincent de Groot, J. Bussmann; TREFAMS-ACE Study Group

Research Article

Become a member of ISMPB

Who can become a member?

Membership in ISMPB is open to everyone from around the world involved in the measurement of free-living physical behaviour.

Membership fees support the mission of ISMPB in creating a vibrant community bringing together people from a wide variety of backgrounds and expertise, including researchers, clinicians, therapists, signal analysts, computational scientists and commercial companies.

Link http://www.ismpb.org/membership/

Member Benefits

- ⇒ Register for Society Meetings at reduced registration rates
- ⇒ Have free access to the society journal : JMPB
- ⇒ Support a new, young and independent Society
- ⇒ Become connected with leading experts in the field
- ⇒ Opportunity to get involved as an ISMPB Committee member
- ⇒ Vote in annual elections for the Board of Directors
- ⇒ Stand for election to the Board of Directors
- ⇒ Eligible for student awards at the Society Meetings (best oral and best poster)
- ⇒ Access to online resources and conference proceedings
- ⇒ Opportunity to post news and information on related events





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