Message from the President

The start of 2021 has been a time for reflection, in very many ways. This past year, we have got used to doing things in very different ways, and these changes have impacted almost every aspect of our lives. As individuals, I am sure we have been reflecting on this. I have thought about what I have missed, but I have also reflected on what changes have turned out to be positive. I believe that this has been the same for our Society. Since this time last year, many of our plans have changed and were changed quite rapidly. Canceling the workshop in Stockholm, postponing our Colorado meeting and moving to online activities has been challenging. However, this has meant that we have had to explore how we can do things in new and innovative ways. For me, nothing will replace face-to-face conferences, and I very much look forward to ICAMPAM 2022 in Colorado. However, when and as we move out of the current crisis, we will blend our old "normal" activities with continually evolving new ways of connecting and enhancing our activities.

This brings me onto our plans for our first virtual conference, ICAMPAM 2021. Since the last newsletter we have now firmed-up dates, and we are now open for abstract submission. The meeting will centre around a series of wide-ranging keynote presentations, representing the spectrum of core activities, and a few talks taking out of our comfort zone. In addition, all presented poster abstracts will now be published in a special issue of our journal. Another new feature of this conference will be a debate on a "hot" topic. Further details will be tweeted, emailed and featured on our website. At this stage, I would like to acknowledge and thank Marina Mancini, who has been coordinating our plans for ICAMPAM 2021.

A few weeks ago, we had another very successful webinar given by Rick Troiano. We are now looking to host further webinars, and in this newsletter, we have put out a call seeking ideas, and organisers, for other webinars to be given throughout the year. So please let us know if you have suggestions. This is going to be a new feature for enhancing our engagement with each other.

We have all experienced various periods of lockdown restrictions, to different degrees. We know how challenging this has been for research and the impact these restrictions have on our patterns of physical behaviour and health. Measurement of these behavioural changes, and finding novel ways to measure these behaviours within lockdown conditions, have become even more critical and certainly more challenging. By addressing these challenges, we will further advance the techniques for measurement of free-living physical behaviour. I am sure we will hear a lot more about this in upcoming publications and presentations.

At this point, I want to take this opportunity to thank the Board for all the work they have undertaken this past year. It has been an extraordinary year, and the challenges of this year have been met by the Board and the committee members' with an extraordinary effort. I would also like to take this opportunity to welcome Esther Smits as our new Newsletter Editor!

I look forward to meeting you online in the near future, but can't wait until we can meet face-to-face again.

Malcolm Granat
Member Profile

Andrea Wendt

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

I am a Brazilian researcher from Pelotas, a university city with 343,132 inhabitants. My first contact with the physical activity field was during my under-grad in Physical Education at the School of Physical Education at the Federal University of Pelotas (UFPEL). My interest in the area started while taking the subjects of physical activity and health and epidemiology. As an undergrad student, discovering the relevance of physical activity in public health motivated my research career. Thus, when I finished my under-graduation course, I decided to start a Master’s course at the Post Graduate Program of Epidemiology at UFPEL. During this Master’s course, I studied social support for physical activity in a population-based sample of older people. This study was also my first accelerometer data collection. Shortly after the Master’s course (2014), I started my Doctoral degree in the same institution, working with birth cohorts. I joined the Accelerometry Research Group (GEPEA - Grupo de Estudos e Pesquisas em Acelerometria) in the same year. During my doctoral course, I studied the effects of physical activity on sleep outcomes across the life-course. Currently, I am in a post-doc position at the Center of Equity in Health. During this time, my interests expanded beyond physical activity, including using public datasets to monitor the health of the Brazilian population, sleep health, and inequalities in health.

Tell us about a current project you are working on.

The pandemic situation stopped any data collection. On the other hand, this time seems to be appropriate to work with secondary data or reanalysis. Currently, I am involved in a series of re-analyses from birth cohort accelerometer based on raw data. The objective of these re-analyses is to include variables to assess 24h patterns. This process is part of a broader research project headed by Prof. Inácio Crochemore-Silva, aiming to analyze the effects of the complete movement spectrum in health outcomes for different ages. I am also working on papers about physical activity inequalities using data from the National Health Surveys (with Brazilian population) and the Global School-based Student Health Survey (GSHS).

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

In the last few years, evaluations of new devices and scripts for objective measurement of physical activity have improved the understanding and the benefits of movement to health. In addition, studies on 24h patterns have recently increased the link between physical activity and sleep. Studies have shown that the effect of physical activity and the combination with sleep and rhythm variables play an essential role in health.

This knowledge about how the 24h patterns and/or specific behaviors affect individuals’ health may help plan strategies and healthy lifestyle interventions.

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

Unfortunately not, but I would like to. In the last few weeks, I was happy to learn that ISMPB is interested in expanding the network to low and middle-income countries with low representativeness. I believe that proactive initiatives of contacting researchers from this part of the world will make ISMPB better known in these countries and consequently increase participation in events.

How do you think ISMPB could work best in your region?

I think the ISMPB has low visibility in Brazil, but I believe that recent initiatives to create links with Brazilian researchers may increase its reach. Regional or remote events may strengthen the access of researchers to ISMPB. In addition, ISMPB events, including speakers from low and middle-income countries showing different physical activity measurement contexts, might be an excellent gateway to divulgation. At last, special prices adequate to low- and middle-income countries that do not provide relevant funding to researchers may also improve the dissemination of ISMPB in these areas.

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

I would see an increased membership of ISMPB exchanging experiences across different contexts and countries with diversified events and strategies to increase the participation of low- and middle-income countries. Furthermore, lack of human resources and funding limit research in low and middle-income countries. Thus, evaluation and use of subjective measures, many times undervalued, are still necessary to monitor physical activity in different populations and might be a topic of interest to be further developed within the ISMPB.

Contact information: Andreatwendt@gmail.com
ORIGINAL RESEARCH

- Physical activity tracking wristbands for use in research with older adults: An overview and recommendations. Alana Weisberg, Alexandre Monte Campelo, Tanzeel Bhaidani and Larry Katz

- Where to place which sensor to measure sedentary behavior? A method development and comparison among various sensor placements and signal types. Roman P. Kuster, Daniel Baumgartner, Maria Hagström and Wilhelmus J.A. Grooten

- Fast and robust algorithm for detecting body posture using wrist-worn accelerometers. Marcin Straczkiewicz, Nancy W. Glynn, Vadim Zipunnikov and Jaroslaw Harezlak

- Equivalency of sleep estimates: Comparison of three research-grade accelerometers. Tatiana Plekhanova, Alex V. Rowlands, Tom Yates, Andrew Hall, Emer M. Brady, Melanie Davies, Kaimis Khunti and Charlotte L. Edwardson

- Bidirectional Day-to-Day associations of reported sleep duration with accelerometer measured physical activity and sedentary time among Dutch adolescents: An observational study. Nathalie Berninger, Gregory Knell, Kelley Pettee Gabriel, Guy Plasqui, Rik Crutzen and Gill Ten Hoor

- Comparison of energy expenditure and step count measured by ActiGraph accelerometers among dominant and nondominant wrist and hip sites. Kayla J. Nuss, Nicolas A. Hulett, Alden Erickson, Eric Burton, Kyle Carr, Lauren Mooney, Jacob Anderson, Ashley Comstock, Ethan J. Schlemer, Lucas J. Archambault and Kaigang Li

- Towards automatic modelling of volleyball players’ behavior for analysis, feedback, and hybrid training. Fahim A. Salim, Fasih Haider, Dees Postma, Robby van Delden, Dennis Reidsma, Saturnio Luz and Bert-Jan van Beijnum

- Validation of Garmin Fenix 3 HR fitness tracker biomechanics and metabolics (VO2max). Bryson Carrier, Andrew Creer, Lauren R. Williams, Timothy M. Holmes, Brayden D. Jolley, Siri Dahl, Elizabeth Weber and Tyler Standifird

- Remote monitoring of cancer patient participation in a 12-week online yoga study: Challenges and directions for future research. Ryan Eckert, Jennifer Huberty, Heidi Kosiorek, Shannon Clark-Sienkiewicz, Linda Larkey and Ruben Mesa

REVIEW

- Accuracy of wearable trackers for measuring moderate–to vigorous intensity physical activity: A systematic review and meta-analysis. Jessica Gorzelitz, Chloe Farber, Ronald Gangnon and Lisa Cadmus-Bertram

For ISMPB Members: Click here to login to member area of the ISMPB website  Click here to access your online subscription to the journal
CALL FOR POSTERS!

Open: January 25, 2021

No fee for abstract submission

Win poster awards!

Get published in a special issue of JMPB!

Close: April 2, 2021 (23:59 CDT)

Main themes
- Applications
- Technology & Algorithm Development
- Measurement and Analysis

Click here to learn more about sub-themes and submission guidelines
Another successful Webinar!

After the successful fall webinar series last year, we are happy to share that our first webinar of 2021 reached 150 live viewers and had ±300 registrations. Dr. Troiano talked about how the data were acquired and cleaned, what is in the files and how to access them. There is still time to watch the full recording (for members and non-members; available until March 3, 2021)! [https://ismpb.org/webinars](https://ismpb.org/webinars)

Do you have good ideas for our 2021 WEBINAR series?

We would like to hear from you!

To focus on continuing to connect our community, ISMPB will be supporting various webinars throughout the year. These webinars will offer insight to our community. Let us know if you have any suggestions for webinars that might be of interest!

Contact: Martina Mancini ([mancinim@ohsu.edu](mailto:mancinim@ohsu.edu))
Can you tell us about current work regarding the measurement of physical behaviour in your region (issues and/or accomplishments)

Saud: The research work of physical activity (PA) in the Eastern Mediterranean Region (EMRO) is low\(^1\). Consequently, measurement of PA and physical behaviour is still immature. There is inequality of the research activities, as rich counties in the region were conducting more studies regarding PA in the last two decades. However, the amount of the research from 1990 and onwards increased noticeably in the region\(^1\). In general, I think one of the important issues regarding the work of the measurement of physical behaviour in my region is a lack of large national studies or national surveillance monitoring systems that use objective measurements.

How have you personally been involved in the measurement of physical behaviour in your region?

Saud: Currently, I am doing my PhD at the University of Copenhagen, Denmark. My project involves the measurement of physical behaviour among Danish pregnant women. When I finish my PhD, I will go back home (Saudi Arabia) and apply what I have learned. I will collaborate with senior researchers in my country to conduct more research in physical behaviour/activity measurement. As EMRO countries are way better now in conducting PA research than a few decades ago, and with the advancement of objective tools to measure physical behaviour, I believe the researchers in the region can catch up soon.

How can ISMPB support researchers in your region?

Saud: I believe ISMPB can play a major role in bringing researchers from different backgrounds and disciplines together to create a community of researchers with the same interest. ISMPB can promote and advocate for objective physical behaviour measurement and drive the focus of research towards this area. In EMRO, there are gaps to be filled in terms of measurement of physical behaviour and by sharing expertise from around the world and its network, ISMPB will enhance our work as researchers in the region.

\(^1\) Ramírez Varela et al., 2021. [https://doi.org/10.1186/s12966-020-01071-x](https://doi.org/10.1186/s12966-020-01071-x)
Representation from South Asia Region

Interested in joining a committee?

- **ICAMPAM SCIENTIFIC COMMITTEE**
- **COMMUNICATIONS AND SOCIAL MEDIA COMMITTEE**
- **JOURNAL COMMITTEE**
- **ISMPB ACTIVITIES COMMITTEE**
- **NOMINATIONS COMMITTEE**

[https://ismpb.org/committees](https://ismpb.org/committees)
RECENT PUBLICATIONS IN PHYSICAL BEHAVIOR MEASUREMENT

Efficacy of the ‘Stand and Move at Work’ multicomponent workplace intervention to reduce sedentary time and improve cardiometabolic risk: a group randomized clinical trial

DOI: 10.1186/s12966-020-0033-3

Prevalence and correlates of adherence to the combined movement guidelines among Czech children and adolescents

Rubin et al. BMC Public Health
DOI: 10.1186/s12889-020-08132-2

Accelerometer output and its association with energy expenditure in persons with mild-to-moderate Parkinson's disease

Jones et al. Sensors
DOI: 10.3390/s20091371

Sedentary Behavior and Diabetes Risk Among Women Over the Age of 65 Years: The OPACH Study

Bellettiere et al. Diabetes Care
DOI: 10.2337/dc20-0301

Quantifying Reliable Walking Activity with a Wearable Device in Aged Residential Care: How Many Days Are Enough?

Buckley et al. Sensors
DOI: 10.3390/s11071484

World Health Organization 2020 guidelines on physical activity and sedentary behaviour

Bull et al. BMJ
DOI: 10.1136/bmj.m3619

Accelerometer-Measured Sedentary Patterns are Associated with Incident Falls in Older Women

Aronberg et al. Journal of the American Geriatrics Society
DOI: 10.1111/jgs.17327
ISMPB ON SOCIAL MEDIA

Looking forward to this @ismpb_org webinar by Rick Troiano on “NHANES 2011-2014 Physical Activity Monitor data” 28th Jan 3pm EST, 8pm UK time, 9pm CET, 29th Jan 6am Brisbane, 7am Sydney. See you over cornflakes or a glass of wine 🍷 #PhysicalActivity @ProPASSProject @ISPAH

Top Tweet!

“NHANES 2011-2014 Physical Activity Monitor data - now FREE!”

Richard P. Troiano, Ph.D., CAPT, U.S. Public Health Service, NHANES Program Director, Risk Factor Assessment Branch of the Epidemiology and Genomics Research Program in NCIC Division of Cancer Control and Population Sciences (ERCP)

Since November 2020

New followers 24 ↓
Profile visits 4491 ↑
Tweets 20 ↓

1 Nov’20 to 31 Jan’21:
On average 582 impressions per day!

Top Follower followed by 3,467 people

Noora Ronkainen 🌟
@NooraRonkainen Follows You

Researcher | @MeaningfulSport | Existential Learning | Host Physical Activity Researcher Podcast

Top mention earned 17 engagements

Watch out everyone @MalcolmGranat is having a Twitter lesson and now has access to the @ismpb_org account!

44 Likes

Happy New Year to all our members and followers. Looking forward to our first virtual conference in 2021 ismpb.org/2021-virtual/ & seeing pictures of members being vaccinated so we can all meet again in Colorado in 2022. #ICAMPAM2021 #ICAMPAM2022 #PhysicalActivity @ProPASSProject

We are super excited 😊 to announce our first Virtual ICAMPAM Congress 📅, June 23-24, 2021 #ICAMPAM2021 Details on registration and abstract submission will follow on the ISMPB website ismpb.org/2021-virtual/

HAPPY 2021!

ICAMPAM 2021
Save the date
June 23-24, 2021
MEMBERSHIP

For MEMBERS:
Please check if you receive ISMPB emails, and that they are not going to your SPAM folder. Make sure that the email address: lauren@podiumconferences.com is marked as SAFE senders list.

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

The current ISMPB membership term runs from October 1, 2020 to September 30, 2022.

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/

✓ Reduced registration rates at meetings/conferences (incl. ICAMPAM)
✓ Access to online JMPB
✓ Join committees
✓ Vote on Society matters and elections
✓ Join and create global network
✓ Quarterly newsletter

Fees:
Category                        | Dues
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