# IPEN Newsletter

IPENINTERNATIONAL PHYSICAL ACTIVITY AND THE ENVIRONMENT NETWORK

ISSUE 4 2015-2016

#### Welcome by Jim Sallis

It has been a very busy past couple of years for IPEN. So busy that we did not manage to publish a newsletter for 2015. So this newsletter includes highlights for 2 years, and there have been very many highlights!

For IPEN Adult, the biggest news is the publication of numerous papers in high-impact journals. I want to congratulate especially the first authors of these papers who worked hard on their papers, coordinating with the many authors, and leading the responses to reviews. Huge thanks are due to the many people who made important contributions to each paper, including Ester Cerin who conducted virtually all the analyses, Ilse de Bourdeaudhuij who leads the Publication Committee and keeps the papers progressing, the Coordinating Center staff for innumerable contributions, the writing teams, and all the co-authors. Each paper really is the result of effective collaboration among many network members.

For IPEN Adolescent, the biggest news is the completion of data collection and transfer of data to the Coordinating Center. CC staff are hard at work checking all the data, creating variables, ensuring comparability of variables across countries, producing "code books" that will show which variables are available for each country, and preparing datasets for analysis. With the assembly of the pooled data set, it was time to initiate the IPEN Adolescent Publication Committee, and we are pleased that Erica Hinckson has agreed to lead this group. She has already updated the IPEN Publication Guidelines and developed a sophisticated fillable form for paper prospectuses. Now is the time for first authors to assemble writing groups for their assigned papers, then draft a paper prospectus. The current paper list, Publication Guidelines, and paper prospectus form can be found <a href="here">here</a>.

There has been much progress on MAPS Global, which we envision as an important built environment measure for research and practice purposes. MAPS Global provides much more precise data than self-report measures and much more detailed microscale data than are available in GIS databases. Though the data collection process requires trained observers and is time consuming, we believe the value of the data will be worth the cost. Of course the unique benefits of MAPS Global are the tool was designed to be relevant worldwide, and the results are comparable across countries. More about all these facets of IPEN, and more, follow in the Newsletter.

#### Two Landmark Lancet Series with IPEN Connections by Jim Sallis

Two Lancet Series related to our work were published in 2016, and numerous IPEN investigators contributed to the papers. These Series are very important for the physical activity field, and the built environment and health field because these topics are so rarely featured in such a high-profile journal (Impact Factor=45.0!!]. The value of these Series is enhanced by the launch events and worldwide press releases

The Second Lancet Series on Physical Activity was released in July 2016. There was extensive coverage of the paper on sedentary behavior led by Ulf Ekelund. The entire issue is open access, so please download it and cite the papers whenever you can.

IPEN investigators who were co-authors included Neville Owen, Adewale Oyeyemi, Mike Pratt, Rodrigo Reis (lead author), Jim Sallis (lead author), and Deborah Salvo.

The Lancet Series on Urban Design, Transport and Health was released in September 2016 at a very nice event across the street from the United Nations building in New York City. The focus on designing healthy cities, and the conclusions and recommendations from this Series, are entirely consistent with our IPEN work. Numerous health effects were considered, and physical activity was identified as a particularly potent mechanism through which urban design affects health. This Series is also open access, so please <u>download</u> and cite these papers too. Twitter: #Healthycities and #Lancetcities; <u>Recording of the launch event</u> in New York City, at the Japan Society: September 23, 2016. My blog about the launch events can be found <u>here</u>.

IPEN investigators who were co-authors included Billie Giles-Corti (lead author), Larry Frank, Neville Owen, Rodrigo Reis, and Jim

Sallis (lead author).



# Changes in Jim Sallis' Situation by Jim Sallis

I want to inform my IPEN colleagues about my personal situation, and how some changes will affect, and hopefully benefit, IPEN. 2016 was a momentous year for me. Most of the events were excellent, such as the high-profile IPEN publications, leading papers for two wonderful Lancet Series, being elected to the National Academy of Medicine, and being President of Society of Behavioral Medicine. However, the biggest event of the year for me was traumatic. My wife and life partner of 39 years, Shemi, passed away on August 16. I am grateful for the many heartfelt notes I received from so many people around the world. The remembrances of Shemi were touching and helped me think about the many good times. Because she accompanied me on so many international trips and hosted parties and dinners over the years, Shemi was well known throughout the IPEN network. Thank you for your comforting messages. Besides being a great cook and hostess, Shemi had a fertile creative life that resulted in dozens of artworks, plus stories and poems. I encourage you to visit the website I built for Shemi so you can enjoy scenes from her life and creations of her mind. I only know of one video of Shemi, and it shows her working on her artistic masterpiece.

In the latter part of 2016 I decided to semi-retire so I could focus my energies on projects of highest priority to me and find a bit more time for things I enjoy other than work. My retirement from UCSD was official at the end of January 2017, but I will continue to work on IPEN and other current projects. I am dedicated to ensuring the IPEN data are fully analyzed and published.

My retirement gives me some freedom to pursue other opportunities. In February 2017 I became a Professorial Fellow at the Australian Catholic University (ACU) in Melbourne. Specifically, I will be joining Ester Cerin and Takemi Sugiyama in the Institute for Health and Ageing. Although I will not be moving to Australia full-time I will visit regularly. Being together with Ester should produce important benefits for IPEN. For example, we are already searching for a Postdoctoral Fellow with advanced skills in statistics to work closely with Ester in analyzing IPEN data. Please help us find an outstanding colleague for this position. Thus, ACU will become a much more important center of action for IPEN. Contact Ester for more information about this position.

Melbourne is a very comfortable place for me, having spent several months of my sabbatical there in 1995. There is no doubt that Melbourne is the capitol of physical activity research in Australia, with longtime colleagues and IPEN leaders Neville Owen at Swinburne University; Jo Salmon, Anna Timperio and team at Deakin University; and Billie Giles-Corti at Royal Melbourne Institute of Technology. I look forward to spending more time with these and other colleagues in Melbourne while enjoying the cultural amenities of the city.

#### IPEN Activities



# IPEN Writing Retreat In Bangkok, Thailand November 15, 2016

The International Congress on Physical Activity and Public Health was the reason so many IPEN investigators were in Bangkok. We had an all-day Writing Retreat in a beautiful room in the Dusit Thani Hotel overlooking a garden with a waterfall. Many thanks to the UCSD Coordinating Center staff for organizing the well-attended retreat.

The morning was devoted to IPEN Adolescent. After an overview from the Coordinating Center, there were presentations by Marc Adams on GIS, Ester Cerin on statistical approaches, and Erica Hinckson on publication guidelines. We had a thorough discussion of timelines for submitting data to the CC, which has now been accomplished. Erica explained new guidelines for paper prospectuses and writing, with attached timelines. Because there is very limited grant support for the CC, all authors need to be timely in submitting prospectuses and drafting papers after analyses are in hand. The Publication Committee will begin regular teleconferences, monitor progress on the key papers, and communicate frequently with authors to help them adhere to timelines. We updated the paper list. The first analysis will be creation of a Good NEWS paper for IPEN Adolescent, led by Ester Cerin. Developing comparable versions of the NEWS will allow other papers to proceed. Since the Bangkok meeting we have learned that the No Cost Extension for the NIH IPEN Adolescent grant has been activated, but this will only provide limited support.

PAGE 2

# IPEN Activities

#### Bangkok Writing Retreat, continued by Neville Owen



The afternoon was spent discussing IPEN Adult papers. We began by celebrating all the recent publications in high-quality journals. There are several more IPEN Adult papers in process that will be submitted soon. Most of the afternoon was devoted to prioritizing additional papers. There are numerous papers on the list that have been planned. However, our ability to complete analyses for many of those papers is limited. We agreed that analysing newly-available IPEN Adolescent data now needs to be the top priority of the Coordinating Center and Ester Cerin's IPEN effort. Authors who want to pursue additional IPEN Adult papers are encouraged to search for statisticians with the advanced skills needed to conduct the analyses.

A new project that was strongly supported was the development of a IPEN Adult summary paper to provide an overview of the main results, identify lessons learned, and make recommendations for research, policy, and practice. The Publications Com-

mittee will make decisions about how to proceed with this paper in the near future. I envision there will be many authors on this paper. We will keep the investigators informed.

Javad Koohsari has undertaken to liaise with Marc Adams around developing novel ways to characterise neighbourhood environmental exposures through the use of space syntax methods. Javad was a research fellow with Neville Owen and Takemi Sugiyama in Melbourne, who is now in Tokyo working on related projects.

#### IPEN at ISBNPA in Edinburgh, Scotland, June 1-6, 2015 by Jim Sallis

#### **IPEN Adult Writing Retreat**

About a dozen investigators attended the IPEN Adult Writing Retreat on June 1 to focus on future papers. We developed a coherent plan to use the unique IPEN data to answer a variety of questions. This was another productive writing retreat with several writing groups meeting together.

#### **IPEN Adolescent Investigator Meeting**

A much larger group of investigators from 11 countries came to the June 2 IPEN Adolescent meeting. Each country gave updates on the status of their studies, and several challenges were identified and discussed. Marc Adams, Larry Frank, and Jim Chapman led a useful session on GIS methods. Thanks to investigators in 5 countries and Terry Conway's analyses, we had inter-observer reliability data for MAPS-Global conducted in person, and the results are very encouraging. We discussed a park audit strategy for IPEN Adolescent, and a couple of investigators are measuring school environments.

Ilse de Bourdeaudhuij described the Publication Committee and our procedures for submitting paper proposals, identifying writing groups and authors, and ensuring quality of the papers. Assignments for lead authors were noted, and nominations for writing groups were made. Based on the IPEN Adult discussion the previous day, we will have further conversation about using perceived and objective environment measures in the same analyses. Looking forward to publications was a good way to end the IPEN Adolescent investigator meeting.

#### IPEN sessions at ISBNPA Conference

Ester Cerin's IPEN Adult symposium had the honor of being listed as the first symposium at ISBNPA. A sizeable audience came to hear 4 data-packed papers presented by Ilse (substituting for Delfien van Dyck), Ester, Neville Owen, and Jim Sallis.



# IPEN Activities

# Visiting the Be Activ India team: IPEN Adolescent in Chennai by Jim Sallis

The most recent team to join the IPEN Adolescent study is from Chennai, India. I was extremely happy to receive an invitation to visit Chennai and be a featured speaker at Dr Mohan's <u>International Diabetes Update 2015.</u>

I had several opportunities to meet with the Be Activ India! team, which is the name of the IPEN-related study. They have made rapid progress in preparing for the study, and they have prioritized their data collection schedule to ensure the Indian data are included in the pooled analyses. It was a pleasure to meet the large team of talented and enthusiastic team members working on the study. They bring a variety of skills and substantial experience, so I am sure the Indian data will be very good quality. They are using a version of the NEWS built environment survey that was mainly developed by Deepti Adlahka, a doctoral student at Washington University in St Louis (who has since moved to Queens College, Belfast, Northern Ireland for a postdoc). Deepti performed a separate reliability and validity study that was presented at ISBNPA 2015 in Edinburgh. Be Active India! also is collecting GPS data and is planning to use MAPS-Global streetscape audits, in addition to blood and anthropometric variables, so they will have a particularly rich data set. I pilot tested MAPS-Global in a couple of sections of Chennai. Though it was challenging due to over-stimulation of the Chennai urban environment, it appears MAPS-Global will do a good job of assessing the strengths and weaknesses of the local environments.

I want to close by expressing my gratitude to Dr Anjana, Dr Mohan, and the Be Activ India team for making possible my first trip to India. I was inspired by learning more about one of the world's oldest civilizations. I was stimulated by the chaos of the city, the charm of the people, the colorful clothing, and the magnificent art. I can only hope that our IPEN network can contribute it a small way to rethinking the role of physical activity in India and that I see progress in this direction on my next visit.



[This article contains excerpts from a longer blog post]

# Visit to Cape Town, South Africa for ISBNPA. June, 2016 by Jim Sallis

My primary reason for attending ISBNPA was to present the NEWS-Africa project. The need for built environment and physical activity research in Africa is evident, due to the rapidly increasing incidence of non-communicable diseases, that are likely being exacerbated by short-sighted land use and transport policies and practices. See the example in the photo of automobile-oriented development and Cape Town sprawl (link below to full blog post). It looks very similar to US development patterns, and we can expect the same negative effects on physical activity and health.

The NEWS-Africa story began in 2010 when Adewale Oyeyemi developed a version of the NEWS (Neighborhood Environment Walkability Survey) for Nigeria. A partnership of the IPEN Adolescent study (funded by National Cancer Institute) and Mark Tremblay's (Ottawa, Canada) study of youth physical activity (funded by IDRC), with the assistance of Vickie Lambert (Cape Town) recruiting investigators from the AFPAN network, organized a meeting with representatives of 7 African countries, hosted in Nairobi, Kenya by Vincent Onywera in 2013. We drafted NEWS-Africa there and further developed and evaluated it over the next two years. Now the reliability and construct validity data are complete for an adult sample from 6 countries, and the timing was perfect for presenting these results at ISB-NPA. Dr Oyeyemi organized and chaired a symposium at ISBNPA. Other presenters were Sandra Kasoma (Uganda), Richmond Aryeetey (Accra, Ghana), and myself. Additional collaborators attended and are included in the photo. I want to note that the presenters led an activity break to end the symposium by celebrating African culture. A paper describing the development and reliability of NEWS-Africa was recently published. The slides from the NEWS-Africa symposium are posted on the IPEN website.



[This article contains excerpts from a longer blog post]

From the NEWS-Africa symposium at ISBNPA 2016. Richmond Aryeetey (Ghana), Jim Sallis (USA), Adewale Oyeyemi (Nigeria, South Africa), Sandra Kasoma (Uganda), Antonio Prista (Mozambique), Hanlie Moss (South Africa), Tracy Kolbe-Alexander (Australia, South Africa), Vickie Lambert (South Africa).

# IPEN Activities

# CEPA at International Congress on Physical Activity and Public Health in Bangkok, Thailand 2016 by Deborah Salvo

The IPEN team had excellent representation at the ISPAH Congress in Bangkok, including a very successful CEPA Symposium chaired by Deborah Salvo and Erica Hinckson. As an official ISPAH Council, CEPA's goal is to build a strong collaborative, multidisciplinary,



international network of researchers to advance the field of physical activity and the environment at a global scale. We were delighted that our session had a full room, with over 60 attendees. Out of the nine short presentations composing the symposium, 7 were IPEN-related. The session was structured in three main themes: 1) examination of the relation of the environment with physical activity across the lifespan; 2) new evidence from low- and middle-income countries on this relation; and 3) the influence of specific environmental systems (e.g., transport, policy) on physical activity. The contributions of IPEN's adult and adolescent studies to the advancement of this field of research at a global scale was recognized and praised by session attendees. It was very rewarding to see so much new evidence from different countries and regions that has emerged in recent years, which is greatly due to the IPEN initiative. A lively 20-minute discussion followed the presentations. A few key aspects for moving forward in our work with CEPA were brought up by session attendees and panelists. These included finding ways to improve our communication and engagement strategies with all members. Also, while recognizing the critical role that IPEN has and should continue to play for CEPA, the need to

move towards the expansion and sustainability of CEPA beyond the IPEN studies and researchers was discussed. In terms of leadership for the council, Rodrigo stepped down as Chair, and Erica Hinckson was designated as the new Chair for CEPA for the new 2-year term, with Deborah Salvo as the co-Chair. The following working groups remain active: urban green space (leader: Jasper Schipperjin), active transport (Takemi Sugiyama), children and youth (Hinckson); older adults (Ester Cerin); policy (Billie Giles-Corti), and Latin America (Jaime Leppe and Deborah Salvo). Stay tuned for more news and ways to get involved with CEPA in the coming months!

# MAPS Global

With input from IPEN Adolescent investigators in many countries, we developed the international MAPS tool, MAPS-Global. We conducted a reliability study of the instrument in 5 countries (Australia, Belgium, Brazil, Hong Kong and Spain), to test the reliability of on-the-ground observations done by two independent raters, and the reliability of online methods such as Google Streetview, both in—and out-of country. These analyses showed high inter-rater reliability and allowed us to settle on a final version of MAPS Global. This version is now being used in many IPEN Adolescent countries, including Belgium, Brazil, Hong Kong, India, Malaysia, New Zealand, Nigeria, Spain, and United States. We look forward to sharing the results of these cross-country observations in the coming year.

#### IPEN Senior

Although NIH has rejected our IPEN Senior proposal twice, we believe this study has great merit and needs to be conducted. Thus, we submitted a revised proposal in early February 2016. The proposal should be more compelling based on the outstanding publication record of IPEN Adult, development and evaluation of MAPS-Global, and additional ongoing IPEN Senior studies in Brazil and Northern Ireland. Mike Pratt will be the PI for this submission. Mike is well known to most of you due to his long-time service to physical activity and his international leadership through CDC. Mike has also been part of IPEN from the beginning. He recently joined the Department of Family Medicine and Public Health at UCSD where he is Director of the Institute for Public Health and is developing a new MPH degree program. Mike will bring strength to this proposal.

Ester Cerin is leading a proposal to conduct an IPEN Senior study in Melbourne, Australia, and it was submitted early in 2017. She is building in several exciting innovations.

Ruth Hunter from Belfast, Northern Ireland was successful in securing funding from a European funder to support studies in Northern Ireland and Brazil that are following the IPEN Senior protocol. These studies are now underway and were incorporated into the NIH submission. The future is looking bright for IPEN Senior.

# A Memorable Attachment at the IPEN Coordinating Center, May-July 2016 by Yi Yi Lee



As a doctoral student and part of the Malaysian IPEN Adolescent and IPEN Adult team, I had the opportunity to visit the IPEN Coordinating Center in San Diego from May to July 2016. I would always be grateful to Dr Jim Sallis, Dr Terry Conway and team for their warm hospitality, new ideas and invaluable guidance during my visit. My memorable albeit short stay in San Diego was and will continue to be one of the most interesting times of my life.

Other than the valuable time I spent in Hillcrest, I managed to participate in three different 5K runs in the city and explore the outdoors of San Diego on foot and public transportation. Travelling on the city bus and trolley (transit) was not something I can always do in Malaysia, a country that has embraced automobile dependence. We have yet to build infrastructure systems that are safe for walking and biking or protected from motorized traffic hazards. Being the most obese country in Asia with the national prevalence of overweight and obesity rates at 30.0% and 17.7%, respectively, the need for physical activity and built environment research in Malaysia is evident.

We have known that dietary factors and physical inactivity contribute to the obesity crisis and increasing prevalence of non-communicable diseases in the country, but the supportiveness of the environment for physical activity has not been explored in-depth. Our team hopes that the results from the

IPEN studies can contribute to calls for action and policy changes in the country to encourage the population to increase their physical activity levels and improve their health outcomes.

#### IPEN Adult Publication Updates by Jim Sallis

The biggest IPEN news of the past two years is the publication of seven empirical papers from IPEN Adult. All of these were published in excellent journals, which I highlighted by listing Impact Factors for each journal below. We were able to obtain open access for many of them, which makes the papers more accessible and likely increases citation rates. Congratulations and thanks to all the lead authors and co-authors for these unique and outstanding contributions to the literature. The supportive reviews and impressive journal outlets can be seen as a validation of the IPEN vision that most of the investigators joined in 2004 or so. This has not been an easy road or a fast trip, but the publications of these high-profile papers is a big reward. I am confident these papers will be widely cited and will help make active design of cities a global movement. Our timing is excellent because our papers provide evidence that supports the United Nations' NCD initiatives and Sustainable Development Goals, in addition to several WHO initiatives. It is clear this work is making contributions to several of the biggest issues on the global agenda.

The publication of an IPEN paper in The Lancet in April 2016 was definitely a triumph for all of us. I am pleased that so many coauthors shared in the credit, though I am very aware that many more people contributed to this wonderful outcome. It was amazing that we had 5 very positive reviews, though many edits were required. The news coverage was substantial, and please use the research brief to broaden the reach of the paper. It would be great if you can translate the brief and distribute it in your country. Please send me a file of the translation so we can post it online. I encourage you to read and share the excellent commentary by Shifalika Goenka and Lars Bo Andersen that accompanied our paper. They estimated that 2 million deaths per year from physical activity (from the 5.3 million total) could be prevented if everyone lived in an activity-friendly city. That is a powerful message about the importance of built environments for health. The paper has been publicized in other important outlets. Our paper was summarized in a JAMA news report about walkability, and it was featured in an environmental newsletter published by the European Union. See links below.

A few other notable facts. Jacqueline Kerr's paper on active transport was published in Environmental Health Perspectives, which is sponsored by the US National Institute of Environmental Health Sciences, part of NIH. Note the high impact factor. The other paper on active transport led by Lars Breum Christiansen was published in a special issue of Journal of Transport and Health, for which Larry Frank was the lead guest editor. The conceptual paper on policy-relevant research led by Billie Giles-Corti was published in Journal of Public Health Policy. This was definitely an IPEN-related paper, which is clear from the topic and author list.

Very early in 2017 the paper led by Larry Frank was published in International Journal of Health Geographics. This analysis of IPEN Adult GIS data evaluated several methods of computing buffers and justified the method used in IPEN Adolescent.

# IPEN Adult Related Publications

- Van Dyck, D., Cerin, E., De Bourdeaudhuij, I., Hinckson, E., Reis, R.S., Davey, R., Sarmiento, O.L., Mitáš, J., Troelsen, J., Macfarlane, D., Salvo, D., Aguinaga-Ontoso, I., Owen, N., Cain, K.L., and Sallis, J.F. (2015). International study of objectively measured physical activity and sedentary time with body mass index and obesity: IPEN Adult study. **International Journal of Obesity, 39**, 199-207. Impact factor=5.00.
- Giles-Corti, B., Sallis, J.F., Sugiyama, T., Frank, L.D., Lowe, M., and Owen, N. (2015). Translating active living research into policy and practice: One important pathway to chronic disease prevention. **Journal of Public Health Policy, 36**(2), 231-243. Open access. <u>Link</u> Impact factor=2.11.
- De Bourdeaudhuij, I., Van Dyck, D., Salvo, D., Davey, R., Reis, R.S., Schofield, G., Sarmiento, O.L., Mitas, J., Christiansen, L.B., Macfarlane, D., Sugiyama, T., Aguinaga-Ontoso, I., Owen, N., Conway, T.L., Sallis, J.F., and Cerin, E. (2015). International study of perceived neighbourhood environmental attributes and Body Mass Index: IPEN Adult study in 12 countries.

  International Journal of Behavioral Nutrition and Physical Activity, 12: 62. Link Impact factor = 4.11.
- Van Dyck, D., Cerin, E., De Bourdeaudhuij, I., Salvo, D., Christiansen, L.B., Macfarlane, D., Owen, N., Mitas, J., Troelsen, J., Aguinaga-Ontoso, I., Davey, R., Reis, R., Sarmiento, O.L., Schofield, G., Conway, T.L., and Sallis, J.F. (2015). Moderating effects of age, gender and education on the associations of perceived neighborhood environment attributes with accelerometer-based physical activity: The IPEN Adult study. **Health and Place, 36**, 65-73. Link Impact factor=2.40.
- Kerr, J., Emond, J.A., Badland, H., Reis, R., Sarmiento, O., Carlson, J., Sallis, J.F., Cerin, E., Cain, K., Conway, T., Schofield, G., Macfarlane, D.J., Christiansen, L.B., Van Dyck, D., Davey, R., Aguinaga-Ontoso, I., Salvo, D., Sugiyama, T., Owen, N., Mitas, J., and Natarajan, L. (2016). Perceived neighborhood environmental attributes associated with walking and cycling for transport among adult residents of 17 cities in 12 countries: The IPEN study. Environmental Health Perspectives, 124(3), 290-298. Posted online July 17, 2015. DOI: 10.1289/ehp.1409466. Link (open access). Impact factor=8.44.
- Sallis, J.F., Cerin, E., Conway, T.L., Adams, M.A., Frank, L.D., Pratt, M., Salvo, D., Schipperijn, J., Smith, G., Cain, K.L., Davey, R., Kerr, J., Lai, P-C., Mitas, J., Reis, R., Sarmiento, O.L., Schofield, G., Troelsen, J., Van Dyck, D., De Bourdeaudhuij, I., and Owen, N. (2016). Urban environments in 14 cities worldwide are related to physical activity. **The Lancet**. Released online April 1, 2016. Impact factor= 45.0. DOI, Open access link, Research brief and blog:

  <u>Comment by Goenka and Andersen Open access</u>
  twitter hashtag: #GlobalActiveCities

Featured in this news article in JAMA. Abbasi, J. As walking movement grows, neighborhood walkability gains attention. JAMA, Medical News and Perspective. Published online June 29, 2016. doi:10.1001/jama.2016.7755 Link

Summarized in this article from a European Union newsletter. 'Science for Environment Policy', 8th July 2016, *Urban design can promote walking: people physically active for up to 1.5 hours more per week in activity-friendly neighbourhoods*, European Commission DG Environment News Alert Service. Link

- Cerin, E., Cain, K.L., Oyeyemi, A., Owen, N., Conway, T.L., Cochrane, T., van Dyck, D., Schipperijn, J., Mitaš, J., Toftager, M., Aguinaga-Ontoso, I., and Sallis, J.F. (2016). Correlates of agreement between accelerometry and self-reported physical activity. **Medicine and Science in Sports and Exercise**, **48**(6), 1075-1084. Impact factor=4.46.
- Christiansen, L.B., Cerin, E., Badland, H., Kerr, J., Davey, R., Troelsen, J., Van Dyck, D., Mitáš, J., Schofield, G., Sugiyama, T., Salvo, D., Sarmiento, O., Reis, R., Adams, M., Frank, L., and Sallis, J.F. (2016). International comparisons of the associations between objective measures of the built environment and transport-related walking and cycling: IPEN adult study.

  Journal of Transport and Health, 3, 467-478. Posted online March 21, 2016. Link. Impact factor=2.05.
- Frank, L.D., Fox, E.H., Ulmer, J.M., Chapman, J.E., Kershaw, S.E., Sallis, J.F., Conway, T.L., Cerin, E., Cain, K.L., Adams, M.A., Smith, G.R., Hinckson, E., Mavoa, S., Chrstiansen, L.B., Hino, A.A., Lopes, A., and Schipperijn, J. (2017). International comparison of observation-specific spatial buffers: Maximizing the ability to estimate physical activity. **International Journal of Health Geographics**, **16**(4). DOI: 10.1186/s12942-017-0077-9. Open access link Impact factor=2.27.

# IPEN Adolescent Publications Updates by Jim Sallis

I'm very pleased to report the first international papers directly related to IPEN Adolescent. We reported about the development of NEWS Africa in a previous newsletter, with updates in this newsletter. With effective leadership of Adewale Oyeyemi, collaboration with investigators in six African countries, and support from the UCSD Coordinating Center, we now have one published paper reporting test-retest reliability and another accepted paper reporting validity in relation to physical activity. Both papers are in excellent journals. Adewale is now pursuing funding to apply NEWS Africa in more countries and in larger samples so the data can be used to raise the profile of physical activity and active cities throughout Africa.

# IPEN Adolescent Related Publications

Oyeyemi, A.L., Kasoma, S.S., Onywera, V.O., Assah, F., Assah, F., Adedoyin, R.A., Conway, T.L., Moss, S.J., Ocansey, R., Kolbe-Alexander, T.L., Akinroye, K.K., Prista, A., Larouche, R., Gavand, K.A., Cain, K.L., Lambert, E.V., Aryeetey, R., Bartels, C., Tremblay, M.S., and Sallis, J.F. (2016). NEWS for Africa: Adaptation and reliability of a built environment questionnaire for physical activity in seven African countries. **International Journal of Behavioral Nutrition and Physical Activity,13**:33. DOI: 10.1186/s12966-016-0357-y. Open access link. Impact factor = 4.11.

Oyeyemi, A.L., Conway, T.L., Adedoyin, R.A., Akinroye, K.K., Aryeetey, R., Assah, F., Cain, K.L., Gavand, K., Kasoma, S.S., Kolbe-Alexander, T.L., Lambert, E.V., Larouche, R., Moss, S.J., Ocansey, R., Onywera, V.O., Prista, A., Tremblay, M.S., and Sallis, J.F. (accepted). Construct validity of the neighborhood environment walkability scale for Africa. **Medicine and Science in Sports and Exercise**. Impact factor=4.46.

#### Australia

# IPEN-Related Publications by Country

Koohsari MJ, Owen N, Cole R, Mavoa S, Oka K, Hanibuchi T, Sugiyama T. Built environmental factors and adults' travel behaviors: role of street layout and local destinations. **Preventive Medicine**. 2017; 96: 124–128.

Koohsari MJ, Owen N, Cerin E, Giles-Corti B, Sugiyama T. Walkability and walking for transport: characterizing the built environment using Space Syntax. **International Journal of Behavioral Nutrition and Physical Activity**. 2016; 11(1).

Koohsari M., Sugiyama T, Mavoa S, Villanueva K, Badland H, Giles-Corti B, Owen, N. Street network measures and adults walking for transport: Application of space syntax. **Health & Place**. 2016; 38: 89-95.

Sugiyama T, Gunn LD, Christian H, Francis J, Foster S, Hooper P, Owen N, Giles-Corti B. Quality of public open spaces and recreational walking. **American Journal of Public Health**. 2015; 100(12):2490-5.

Koohsari MJ, Mavoa S, Villanueva K, Sugiyama T, Badland H, Kaczynski AT, Owen N, Giles-Corti B. Public open space, physical activity, urban design and public health: Concepts, methods and research agenda. **Health and Place.** 2015; 33: 75-82.

Giles-Corti B, Sallis JF, Sugiyama T, Frank L, Lowe M, Owen N. Translating active living research into policy and practice: One important pathway to chronic disease prevention. **Journal of Public Health Policy.** 2015; 36(2):231-43.

Koohsari MJ, Sugiyama T, Sahlqvist S, Mavoa S, Hadgraft N, Owen N. Neighborhood environmental attributes and adults' sedentary behaviors: Review and research agenda. **Preventive Medicine**. 2015; 77: 141-149.

Cole R, Dunn P, Hunter I, Owen N, Sugiyama T. Walk Score and Australian adults' home-based walking for transport. **Health and Place**. 2015; 35: 60-65.

Sugiyama T, Shibata A, Koohsari MJ, Tanamas SK, Oka K, Salmon J, Dunstan DW. and Owen N. Neighborhood environmental attributes and adults' maintenance of regular walking. **Medicine and Science in Sports and Exercise**. 2015; Vol.47(6): 1204-1210.

Sugiyama T, Inoue S, Cerin E, Shimomitsu T, Owen N. Walkable area within which destinations matter: Differences between Australian and Japanese cities. **Asia-Pacific Journal of Public Health**. 2015, Vol.27(2): 2757-63.

Koohsari MJ, Sugiyama T, Kaczynski AT, Owen N. Associations of leisure-time sitting in cars with neighborhood walkability. **Journal of Physical Activity and Health**. 2014; 22(4): 508-17.

# Belgium

Grasser G, Van Dyck D, Titze S, Stronegger W. A European perspective on GIS-based walkability and active modes of transport. **European Journal of Public Health**, in press.

D'Haese S, Cardon G, De Bourdeaudhuij I, Deforche B, De Meester F, Van Dyck D. Changes in individual and social environmental characteristics in relation to changes in physical activity: a longitudinal study from primary to secondary school. **International Journal of Behavioral Medicing** 2016; 23: 539-552

Van Wolleghem G, Ghekiere A, Cardon G, De Bourdeaudhuij I, D'Haese S, Geremia CM, Lenoir M, Sallis JF, Verhoeven H, Van Dyck D. Using an audit tool (MAPS Global) to assess the characteristics of the physical environment related to walking for transport in youth: reliability of the Belgian data. **International Journal of Health Geographics** 2016; 15: 41.

Dewulf B, Neutens T, Van Dyck D, De Bourdeaudhuij I, Broekx S, Beckx C, Van de Weghe N. Associations between time in green areas and physical activity among late middle-aged adults. **Geospatial Health** 2016, 11: 411

Van Holle V, Van Cauwenberg J, De Bourdeaudhuij I, Deforche B, Van De Weghe N, Van Dyck D. Interactions between neighborhood social environment and walkability to explain Belgian older adults' physical activity and sedentary time. **International Journal of Environmental Research and Public Health** 2016; 13: 569.

Vanwolleghem G, Van Dyck D, De Meester F, De Bourdeaudhuij I, Cardon G, Gheysen F. Which socio-ecological factors associate with a switch to or maintenance of active and passive transport during the transition from primary to secondary school? **PLOS One** 2016; 11: e0156531.

Vanwolleghem G, Schipperijn J, Gheysen F, Cardon G, De Bourdeaudhuij I, Van Dyck D. Children's GPS-determined versus self-reported transport in leisure time and associations with parental perceptions of the neighborhood environment. **International Journal of Health Geographics** 2016; 15:16.

Van Holle V, Van Cauwenberg J, Gheysen F, Van Dyck D, Deforche B, Vande Weghe N, De Bourdeaudhuij I. The association between Belgian older adults' physical functioning and physical activity: what is the moderating role of the physical environment? **PLOS One 2016**, 11(2):e0148398.

Van Cauwenberg J, Van Holle V, De Bourdeaudhuij I, Van Dyck D, Deforche B. Neighborhood walkability and health outcomes among older adults: the mediating role of physical activity. **Health & Place** 2015, 37: 16-25.

Van Holle V, Van Cauwenberg J, Deforche B, Van de Weghe N, De Bourdeaudhuij I, Van Dyck D. Do psychosocial factors moderate the association between objective neighborhood walkability and older adults' physical activity? **Health & Place** 2015; 34: 118-125.

D'Haese S, De Meester F, Van Dyck D, De Bourdeaudhuij I, Deforche B, Cardon G. Changes in the perceived neighborhood environment in relation to changes in physical activity: a longitudinal study from childhood into adolescence. **Health & Place** 2015; 33: 132-141.

# Latin America

Alberico, C. O., J. Schipperijn & R. S. Reis (2016) Use of global positioning system for physical activity research in youth: ESPACOS Adolescentes, Brazil. **Preventative Medicine**.

Salvo D, Sarmiento OL, Reis RS, Hino AA, Bolivar MA, Lemoine PD, Gonzales PB, Pratt M. Where Latin Americans are physically active, and why does it matter? Findings from the IPEN-adult study in Bogota, Colombia; Cuernavaca, Mexico; and Curitiba, Brazil. **Preventative Medicine** 2016 Sep 5. pii: S0091-7435(16)30264-X. doi: 10.1016/j.ypmed.2016.09.007

Pablo D. Lemoine, Olga L. Sarmiento, Jose David Pinzón, Jose D. Meisel, Felipe Montes, Dario Hidalgo, Michael Pratt, Juan Manuel Zambrano, Juan Manuel Cordovez, Roberto Zarama TransMilenio, a Scalable Bus Rapid Transit System for Promoting Physical Activity. **Journal of Urban Health** 2016 1-15 DOI: 10.1007/s11524-015-0019-4

D Salvo, C Torres, U Villa, JA Rivera, OL Sarmiento, RS Reis, M Pratt. Accelerometer-based physical activity levels among Mexican adults and their relation with sociodemographic characteristics and BMI: a cross-sectional study **International Journal of Behavioral Nutrition and Physical Activity** 12 (1), 79 (2015)

D Salvo, RS Reis, OL Sarmiento, M Pratt. Overcoming the challenges of conducting physical activity and built environment research in Latin America: IPEN Latin America. **Preventive Medicine**, 69 S82-S92

AAF Hino, RS Reis, OL Sarmiento, DC Parra, R. Brownson. Built Environment and Physical Activity for Transportation in Adults from Curitiba, Brazil. **Journal of Urban Health** June 2014, Volume 91, Issue 3, pp 446-462 doi:10.1007/s11524-013-9831-x

#### South Africa

Clare Bartels, PhD attended a Bellagio Conference on Public Spaces in African Cities that produced the Bellagio Accord for Public Spaces in African Cities. <u>Link.</u>

#### Spain

Molina-García, J., Queralt, A., Estevan, I., Álvarez, O., & Castillo, I. (2016). Perceived barriers to active commuting to school: reliability and validity of a scale. **Gaceta Sanitaria**;30(6):426-431. doi: 10.1016/j.gaceta.2016.05.006.

#### United States

Carlson, J.A., Saelens, B.E., Kerr, J., Schipperijn, J., Conway, T.L., Frank, L.D., Chapman, J.E., Glanz, K., Cain, K., and Sallis, J.F. (2015). Association between neighborhood walkability and GPS-measured walking, bicycling and vehicle time in adolescents. **Health and Place**, **32**, 1-7.

Kercood, S., Conway, T.L., Saelens, B.E., Frank, L.D., Cain, K.L., and Sallis, J.F. (2015). Parent rules, barriers, and places for youth physical activity vary by neighborhood walkability and income. **Children, Youth, and Environments, 25**(1), 100-118. DOI: 10.7721/chilyoutenvi.25.1.0100. http://www.jstor.org/action/showPublication?journalCode=chilyoutenvi.

Adams, M.A., Todd, M., Kurka, J., Conway, T.L., Cain, K.L., Frank, L.D., and Sallis, J.F. (2015). Patterns of walkability, transit and recreation environments for physical activity. **American Journal of Preventive Medicine**, **48**(6), 878-887. Published Online: July 29, 2015. doi:10.1016/j.amepre.2015.05.024.

Sallis, J.F., Cain, K.L., Conway, T.L., Gavand, K., Millstein, R.A., Geremia, C.M., Frank, L.D., Saelens, B.E., Glanz, K., and King, A.C. (2015). Is your neighborhood designed to support physical activity? A brief streetscape audit tool. **Preventing Chronic Disease**, 12:150098. Open access. Posted online September 3, 2015.

Kurka, J.M., Adams, M.A., Todd, M., Colburn, T., Sallis, J.F., Cain, K.L., Glanz, K., Frank, L.D., and Saelens, B.E. (2016). Patterns of neighborhood environment attributes in relation to children's physical activity. **Health & Place**, **34**(6), 164-170.

Engelberg, J.K., Carlson, J.A., Conway, T.L., Cain, K.L., Saelens, B.E., Glanz, K., Frank, L.D., and Sallis, J.F. (2016). Dog walking among adolescents: Correlates and contribution to physical activity. **Preventive Medicine**, 82(1), 65-72.

Thornton, C.M., Conway, T.L., Cain, K.L., Gavand, K.A., Saelens, B.E., Frank, L.D., Geremia, C.M., Glanz, K., King, A.C., and Sallis, J.F. (2016). Disparities in pedestrian streetscape environments by income and race/ethnicity. **SSM-Population Health, 2,** 206-216. Open access. Published online May 2016. Link to research brief

Engelberg, J.K., Conway, T.L., Geremia, C., Cain, K.L., Saelens, B.E., Glanz, K., Frank, L.D., and Sallis, J.F. (2016). Socioeconomic and race/ethnic disparities in observed park quality. **BMC Public Health, 16**:395. <a href="mailto:Open access">Open access</a>. DOI 10.1186/s12889-016-3055-4. <a href="mailto:Link to research brief">Link to research brief</a> http://dx.doi.org/10.1080/02701367.2016.1153779

White, M.N., King, A.C., Sallis, J.F., Frank, L.D., Saelens, B.E., Conway, T.L., Cain, K.L., and Kerr, J. (2016). Caregiving, transport-related, and demographic correlates of sedentary behavior in older adults: The Senior Neighborhood Quality of Life Study (SNQLS). **Journal of Aging and Health, 28**(5), 812-833. DOI: 10.1177/0898264315611668

Esteban-Cornejo, I., Carlson, J.A., Conway, T.L., Cain, K., Saelens, B.E., Frank, L.D., Glanz, K., Roman, C.G., and Sallis, J. F. (2016). Parental and adolescent perceptions of neighborhood safety related to adolescents' physical activity in their neighborhood. **Research Quarterly for Exercise and Sport**, **87**(2), 191-199. Published online March 31, 2016. doi: 10.1080/02701367.2016.1153779.

Carlson, J.A., Schipperijn, J., Kerr, J., Saelens, B.E., Natarajan, L., Frank, L.D., Glanz, K., Conway, T.L., Chapman, J.E., Cain, K.L., and Sallis, J.F. (2016). Physical activity in home, school, and other locations as assessed by GPS in young adolescents. **Pediatrics, 137**(1), e20152430. doi: 10.1542/peds.2015-2430

Lachapelle, U., Frank, L.D., Sallis, J.F., Saelens, B.E., and Conway, T.L. (2016). Active transportation by transit-dependent and choice riders and potential displacement of other physical activity. **Journal of Planning Education and Research**, **36**(2), 225-238.

Perry, C.K., Ackert, E., Sallis, J.F., Glanz, K., and Saelens, B.E. (2016). Places where children are active: A longitudinal examination of children's physical activity. **Preventive Medicine**, **93**, 88-95.

Carlson, J., Dean, K., and Sallis, J. (2017). **Measures registry user guide: Physical activity environment.** National Collaborative on Childhood Obesity Research: Washington, DC. <a href="Download">Download</a>

IPEN Investigators: Please <u>send any additional publications</u> which did not make it into the newsletter to the IPEN Coordinating Center so that they can be posted on the IPEN website.

