One of the new PRC staff members, Dr Lina Engelen, together with Professors Louise Baur and Adrian Bauman, has been involved in an exciting project over the past four years exploring the effects of an innovative school-based physical activity intervention. The Sydney Playground Project involved the placing of a variety of loose materials such as milk crates and car tyres in primary school playgrounds, giving children opportunities for creative outdoor play. Workshops were also conducted with parents and teachers to discuss play and perceptions around risk.

The project took place in 2009-2010 in six Catholic primary schools in a mixture of low- and high-SES areas of Sydney; these were compared to six similar schools which did not receive the intervention. The study found increases in children’s physical activity and decreases in their sedentary behaviour during recess times, as measured by accelerometers worn throughout the school day. Specific effects occurring during break times in the 221 five to seven year olds who participated in the study were a small but significant increase on total accelerometer counts (9400 counts, p = 0.002) and minutes of MVPA (1.8 min, p = 0.006); a decrease in sedentary activity (2.1 min, p = 0.01) also occurred. Promising long-term effects were also evident in one school where re-testing took place after two years and maintenance of these improvements was found.

Another benefit of the program noted by the researchers was more inclusive play practices by the children, including active participation of individuals with disabilities. Further, the flexibility in the types of materials (e.g. recycled materials like cardboard boxes) that could be used in the program made it environmentally sustainable and low-cost. Playground kits can also now be purchased by schools from Reverse Garbage in Marrickville for around $500.

The project was funded by grants from the Australian Research Council (ARC) and the National Health and Medical Research Council (NH&MRC).

Welcome to the first 2013 edition of our newsletter. Our newsletter is an outcome-based report. In it, we draw attention to results of some of the work we do. This edition highlights recent research and policy-relevant work in active settings (cities, playgrounds and offices), tobacco, cycling, the Get Healthy Service, community-based obesity prevention and nutrition labels. While we also use the newsletter to welcome and farewell our colleagues, we do not otherwise discuss our environment and processes. I’d like to give you a brief description of behind the scenes at PRC. PRC is a collegial environment with countless opportunities for learning. PRC is a healthy place where our projects keep our minds and bodies active; where we apply and adapt to our research findings:

- PRC has recently replaced our shared bicycle, available to staff for breaks or trips to other meeting sites, as the old one had died from wear and tear. In March, Prof Chris Rissel offered the second of two workshops on changing bicycle tyres. PRC studies, enables and practices active commuting.
- We like to be active in other ways, too. Meetings are sometimes scheduled around yoga classes. Eleven of us, representing birthplaces on five continents, recently gathered on a Sunday for a beautiful 14km walk along Sydney’s harbour.
- With all that continental representation, you can bet that language and cultural learning is frequent. In the last month, I’ve learned a new Aussie phrase (“taking an early minute”) and explained the etymology of “going ‘cold turkey’”. Should we need a break- or inspiration- the office now has a copy of 60 Australian poems.
- At this moment I can see two people standing in a meeting and another, Dr Jo Chau, is standing at her sit-stand desk. That means 33% of my study sample are standing; pretty healthy, (I’m standing, too, as I write my draft.)
- We started the month with a morning tea. On the table were an apple tart and some chocolate cookies, but also humus and cucumber and caponata. My forse is not nutrition, but even I can tell you this is healthier food than offered at many other offices. (And the portion sizes look more appropriate, too.)

It is a delight to work here at PRC and it has been a pleasure to assist the newsletter team with this publication.

Erika

**RECENT PRC PUBLICATIONS**


van der Ploeg HP, Banks E, & Bauman AE. (2012). Is sitting harmful to health? It is too early to say-reply, Archives of Internal Medicine, 172(16),1272-3.
Prolonged periods of sitting, independent of time spent in moderate to vigorous physical activity, are associated with reduced health and mortality. An obvious setting in which to reduce periods of sitting is the workplace – many of us are bound to our desks for hours at a time and take insufficient breaks. As preventive health specialists we felt it was important that we practice what we preach; hence, PRC recently invested in a number of sit-stand desks (SSDs) and evaluated if SSDs were effective in reducing sitting time.

Sixteen SSDs were allocated to PRC staff on a ‘first come first served’ basis, resulting in approximately 35% of staff having access to this type of desk at work. Self-reported measures in matched online surveys pre-introduction of SSDs and ten weeks later included sitting and standing time over a working week in and outside of work time, number of breaks from sitting at work, musculoskeletal issues, and perceived benefits and/or negative aspects of SSDs. Time spent moving at work was also determined objectively using accelerometers. All staff, with or without SSDs, were invited to participate in the evaluation.

Preliminary results concerning time spent standing and sitting at work are encouraging. Although the sample size for this study was not sufficient to achieve statistically significant results, self-reported proportion of work time spent standing increased from 7.8% to 22.6% and sitting decreased from 80.6% to 69.9% (Fig 1). Objectively-measured proportion of work time spent sedentary and in activity was seemingly not affected by access to SSDs, however overall time spent standing at work increased due to an increase of 93 minutes in average time spent at work (among full- and part-time staff).

Findings concerning sitting and activity time outside of work were mixed; there was some indication of compensatory effects, although these data were not significant. Few people reported any negative aspects associated with using the SSDs or having them in the workplace, although early attention to ergonomic issues is important. At follow-up, those with SSDs were resoundingly positive about them (“I really start to get restless if I’ve been sitting for too long”); and several staff that currently do not have a SSD have expressed interest in having one. A longer-term follow-up is planned to see if the positive effects are sustained.

Fig 1: Self-reported percentage of time spent in various activities during work hours, before the introduction of the sit-stand desks (SSDs) and at 10 weeks follow-up (n=14)
GRANT SUCCESS

Congratulations to Dr Josephine Chau, who won an Early Career Researcher Grant from the University of Sydney Medical School. Dr Chau, along with Dr William Sukala of Southern Cross University, will be studying the effects of interventions designed to reduce sitting time. Too much sitting time has been linked with higher risk for chronic diseases. In this project, Optus call centre workers will be provided a sit-stand workstation and daily reminders to stand up during the workday. The workers’ work and leisure-time physical activity will be measured by monitor and questionnaire before and at two time-points after the installation of these workstations. The project will be advised by Professor Adrian Bauman and Associate Professor Amanda Sainsbury-Salis.

Congratulations also to Professor Chris Rissel. Along with Associate Professor Stephen Greaves, Dr Li Ming Wen and Professor Anthony Capon, Rissel has been awarded $380,000 from the Australian Research Council to study the development and application of an evaluation framework to assess transport, health and economic impacts of new urban cycling infrastructure. Partner organisations on the grant include National Heart Foundation of Australia, NSW Roads and Traffic Authority, NSW Ministry of Health, City of Sydney Council, and Premier’s Council for Active Living. The researchers aim to develop a more accurate and simple approach than what is currently available to measure impacts of cycling infrastructure. Their approach will be applied to a new bicycle path to be built by the City of Sydney to demonstrate the full transport, environmental, health, and economic impacts on the community.

We wish Jo and Chris the best on their new projects.

PRC FAREWELLS DR ALEXIS ST. GEORGE

In the three years Dr Alexis St. George spent at PRC, her accomplishments were many. She completed her Masters and Doctorate in Public Health, and published on an array of topics: diabetes prevention, workplace health promotion, obesity prevention, and liver disease.

Alexis’ skills in data analysis, systematic reviews, research and project management, stakeholder engagement, partnership building and report writing have greatly benefitted PRC. We will miss her sense of humour and friendly nature.

We wish Alexis well in her new role at a private health consulting and research firm.
COMMUNITY-BASED OBESITY PREVENTION INITIATIVES

The Collaboration of Community-based Obesity Prevention Sites (CO-OPS Collaboration) is an initiative funded by the Australian Government Department of Health and Ageing. CO-OPS aims to support community-based obesity prevention initiatives through a collaborative approach to promoting best practice and knowledge translation, and by providing networking opportunities, support and advice.

PRC’s Associate Professor Timothy Gill sits on the CO-OPS Executive Committee and Dr Sinead Boylan is the Needs Assessment Fellow, conducting consultations with health practitioners and organisations nationwide.

It is hoped that there will be consultations in both northern and southern areas of NSW in the near future. For more information, please visit: http://www.co-ops.net.au/.

BUTT OUT BIG TOBACCO!

The Cancer Institute NSW is undertaking the Tobacco Promotions Impact Study, a world first, looking at the effect of tobacco advertising and promotion on the smoking behaviours and cognitions of young people. In collaboration and partnership with the Cancer Institute NSW, PRC has provided research oversight and analytical support to the study.

The first publication identified (1) levels of exposure in NSW adolescents and young adults to tobacco promotion at point-of-sale (PoS), on the internet, in entertainment media and at venues; and (2) those most at risk of exposure. The results indicated that a substantial proportion of the young people surveyed reported seeing tobacco promotion sometimes or often in the last month over most of the channels studied. Further,

- The highest levels of exposure were at the PoS (approx. two-thirds) and to people smoking cigarettes in movies (77%); and
- Lower levels of exposure to tobacco promotions and imagery were reported in pubs, clubs, nightclubs or bars (31%); at events or festivals (22.5%); and on the internet (20%).
- Exposure in video games was reported at 23%, however, the odds of exposure through video games increased by 8% for every additional hour spent on the internet per day.

This study shows that despite the strict restrictions on the marketing of tobacco products, adolescents and young people are still exposed to tobacco promotions and advertising.

MORE CYCLISTS IN SYDNEY? DEPENDS WHERE YOU LOOK

Increasing the number of commuters who use bicycles to get to work is an essential element of sustainable transport systems. Recently, Drs Alexis Zander and Chris Rissel analyzed the levels of cycling in Sydney using the 2001, 2006 and 2011 Censuses.

The number and proportion of people cycling to work in the combined Sydney and Greater Metropolitan Region increased by 38% and 25%, respectively. Most of the increase occurred between 2006 and 2011, and nearly all in inner Sydney. Significant increases in the proportion of cyclists in inner Sydney (up 83%) have been offset by declines in the Greater Metropolitan Region (down 19%). The outer Sydney and the Greater Metropolitan Region have significantly lower proportions (at 0.6 and 0.9%, respectively) of cyclists than inner Sydney (2.2%). Large distances to places of work, heavy traffic and a lack of investment in cycling infrastructure likely contribute to these lower rates.

The increases in both number and proportion of people cycling to work in inner Sydney show clearly that where investment has been made in cycling infrastructure, and where distances are achievable, increases in cycling have followed.

References:


ACTIVE, HEALTHY CITIES: VARIATION IN PHYSICAL ACTIVITY BETWEEN AUSTRALIAN CITIES

Quality urban infrastructure is recognised as positively influencing physical activity behaviour. PRC researchers looked at differences in leisure-time physical activity among residents (16 years or older) in Australian state capitals. Data from 2001-2009 was used to compare the prevalence of meeting recommended health-enhancing physical activity and levels of walking.

Physical activity and walking increased in all eight capital cities over the past decade. There were significant differences in the overall levels of physical activity and walking between the cities, with Sydney the least active. Residents of Melbourne, Brisbane, Perth and Canberra were significantly more active than those from other cities when considering overall physical activity. Residents of Hobart, Perth and Melbourne were significantly more likely to walk five or more sessions per week compared to residents in other cities.

While these variations may be due to infrastructure and design differences, no comparative information on indicators of the built environment and transport infrastructure is available. Evaluation of urban infrastructure and policy could facilitate more beneficial physical activity environments across Australian cities.

CONSUMERS’ UNDERSTANDING OF NUTRITION GUIDANCE ON FOOD CONSUMPTION

A recent study conducted by researchers from PRC and Cancer Council NSW found consumers were uncertain about what the term ‘extra foods’ meant and how often such foods should be eaten. The study also found that there was wide variation in how consumers interpreted advice such as ‘eat occasionally’ or ‘eat sometimes’.

This study surveyed 405 shoppers at shopping centres in metropolitan Sydney, asking how frequently a food labelled as an ‘extra food’ should be eaten. There was a wide range of responses: 8% of shoppers stated they were unsure, 9% believed it depended on the food, 16% said it should be monthly and 20% said weekly.

A sub-sample of 29 people was interviewed about their responses; almost half appeared to guess what ‘extra food’ meant: ‘if I had to imagine one, I assume they might be talking about a snack, something you’d consider above a normal meal’. Similarly, consumers did not consistently interpret the term ‘sometimes food’, with one person saying ‘it didn’t mean much to me, it’s a bit vague’.

The authors suggest that nutrition guidance should specify precise quantities and frequencies of consumption. The study also indicates the need for nutrition advice to be thoroughly consumer-tested. These findings have implications for a range of communications—consumer guides, health and nutrition websites, food labelling systems, setting-based nutrition programs, and nutrition advice and counselling.


On Tuesday 20th November 2012, the NSW Office of Preventive Health and PRC hosted a seminar showcasing the achievements of the NSW Get Healthy Information and Coaching Service. Among the presenters were the NSW Chief Health Officer, Dr Kerry Chant, along with Professor Adrian Bauman, Director, PRC, Professor Chris Rissel, Director, Office of Preventive Health, and Dr Guan Yeo, who is now President of the Royal Australian College of General Practitioners (NSW & ACT).

The seminar included presentations on the benefits of the Service to people at risk of chronic disease, the Service enhancements currently underway to maximise these benefits, and the ways in which health professionals can support their patients in accessing the Service. The seminar also saw the release of a summary of results of the PRC evaluation of the Get Healthy Service. The summary is available at http://sydney.edu.au/medicine/public-health/prevention-research/research/program-evaluation.php.
MEET AND GREET

ŽELJKO PEDIŠIĆ
Željko (“Z”) joined PRC as a Postdoctoral Research Associate in February 2013. He has been employed by the University of Zagreb since 2006, where he teaches statistics and theory of measurement, conducts public health research, and provides statistical consulting services and methodological support for researchers and students. His primary research interest is in methodological issues of physical activity assessment.

Z describes his Sydney gap year between his postdoc at the Karl-Franzens University of Graz, Austria, and return to the University of Zagreb as “a stimulating 'intermezzo'”. He will work with Adrian Bauman on several research projects on physical activity and sedentary behaviour.

In his leisure-time, Z enjoys playing the piano and composing classical music. His ballade in B-minor for piano and oboe recently received its first public performance at the Sancta Sophia College in Sydney.

MANOS STAMATAKIS
Manos joined PRC in January as an Associate Professor; he will lead the sedentary behaviour and physical activity epidemiology group. Manos also holds positions in the UK as Head at the University College London Physical Activity Research Group (PARG) and as Career Development Fellow at the National Institute for Health Research.

Manos’ primary research interests include the effects of physical activity/sedentary behaviour on cardiometabolic disease; physical activity in medical education; physical activity and mental health; and physical activity surveillance.

When outside the office, Manos can be found running, in yoga class or acting as a house/techno music DJ. He is prone to stroking strangers’ dogs as he misses his dog, Rozi.

ANNA DO
Anna is a trainee biostatistician who will be working with PRC for 6 months. She will be providing statistical support for a variety of projects, including the 45&Up study and the evaluation of the Get Healthy Service. Previously, she has worked at the Ministry of Health on projects that included flu surveillance and examining health outcomes associated with living close to mining areas.

Anna recently submitted her thesis for a Doctorate in Animal Science. Her research involved salmon genetics.

Anna enjoys reading, cooking and working out at the gym or the park.

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