Welcome to the first edition of the Centre for the Built Environment and Health’s newsletter Changing Places.

Since the Centre was established in 2007, we have been building our research program, actively exploring how the environments in which we live, work and play affect our health and wellbeing. This is a relatively new field of health research but one that is growing steadily in importance as our population expands.

In just under 50 years, Australia’s population is expected to increase to 35.5 million, and Perth’s population to grow by 120 per cent. If we want neighbourhoods that promote our physical health and reduce our reliance on cars, that encourage social connectedness, and that cater for the changing health and wellbeing needs of individuals as they age, then we must re-examine issues of urban density and the way we plan and build our cities.

In a conference address in October last year titled ‘Building 21st Century cities’, the Federal Minister for Infrastructure, Transport, Regional Development and Local Government, Anthony Albanese MP, suggested that the need to pay attention to the state of our cities was more urgent than ever, and that public health was one of the key factors to be addressed in expanding and reshaping them.

“Urban issues of poor air quality, heat stress, lack of quality green space and physical inactivity result in obesity, respiratory, mental and other public health problems,” he told conference delegates.

“On some of the less well-designed housing estates, it’s probably not even possible these days to do anything practical like shopping or taking children to school on foot.

“The price we pay for this poor planning is high. The direct and indirect cost of obesity, for instance, is estimated at around $21 billion annually, while the direct cost of physical inactivity is $377 million.

“We must act on this.”

The Federal Government is looking to establish a National Urban Policy that will set a framework for the development of more sustainable, equitable, affordable, less congested and healthier urban environments. The Centre’s research will hopefully contribute to the debate about what is required to achieve this goal.

I know that many of you involved in designing, planning and constructing our neighbourhoods are already hungry for this change, but want to know more about the complex issues at play to plan the best way forward.

This newsletter is designed to keep you up to date with the emerging evidence on which changes to our built environment can be based – in a way that we hope is directly relevant to your own needs and interests.

In this first edition, for example, we profile the important research that is happening around planning for active retirement, as well as some interesting findings about how the design of local parks can affect their usage and potential health benefits. These are issues that impact directly on community health and that, through better planning, we can do something about.

Close partnerships – between ourselves as the evidence-providers and producers and yourselves as the policymakers and practitioners – will be central to achieving our shared goal of building healthier, more sustainable communities.

This newsletter also profiles some of these partnerships at work, and the practical tools they are providing for getting on with this important job.

Lastly, we hope to bring you information on publications, web sites and other resources that may support your work and interest in the area of the built environment, as well as news of seminars, conferences and other upcoming events that may also be of relevance to you.

We hope you find this publication useful, and look forward to any feedback you may have.

Professor Billie Giles-Corti
Director
Defying the old actors’ adage that you should never work with animals or children, researcher Dr Hayley Christian (nee Cutt) has hit a rich vein of public interest with her PhD study into the physical activity benefits associated with owning a dog.

With around 40 per cent of households in Australia falling into this category (one of the highest rates of dog ownership in the world), the media was quick to pick up on her findings that acquiring a dog leads to a significant increase in recreational walking, and that this increase in exercise is likely to be sustained over time. In short, her research has shown that responding to your dog’s pleading looks in the direction of getting you in greater contact with nature while you get your physical work-out.

As well as making a splash in the local and national media, the study findings were showcased at a recent National Institutes of Health workshop in the United States, where household dog ownership is at similarly high levels. Dr Christian has also been contacted by a number of international research groups wanting to collaborate on research projects and to use and adapt her survey methods.

Also excited by her research findings is her industry partner, the Petcare Information and Advisory Service Australia (PIAS), which provided both financial and in-kind support for her PhD study as part of an Australian Research Council (ARC) Linkage grant. (The ARC Linkage grants scheme supports collaborative research between higher education organisations and industry.)

An autonomous, non-commercial organisation funded by Masterfoods, PIAS’ charter includes: educating owners on the responsibilities of pet ownership, undertaking original research on the relationship between human and companion animals; encouraging pet ownership in balance with society’s needs; and helping owners to enjoy their pets.

PIAS supported Dr Christian’s research without placing any restrictions on the design, analysis or interpretation of her research findings.

According to PIAS director Dr Timothy Adams, the research represents a huge leap forward in understanding the link between dog ownership and health.

*“Prior to the commencement of Dr Christian’s PhD, the link between dog ownership and physical activity was not well recognised,”* he said.

*“In just a few years, this area of research has now come under considerable attention from both the private and public sectors on the international stage.”*

*Dr Christian has described some useful and inexpensive policy concepts that have the potential to increase both physical activity and responsible dog ownership.”*

He added that the research has been of enormous value to the organisation in furthering its own aims.

*“Our knowledge and understanding of the links between dog ownership, physical activity and the broader community have been lifted considerably. This has brought legitimacy and credibility to discussions on the topic through several channels including symposiums, media, a pet-friendly suburb development and national health and place initiatives.”*

The work of Dr Christian’s enables PIAS to continue to speak with authority on the role of dog ownership in the community, and helped us to remain a valued and unique resource.*

Two other industry-partnered PhD projects were funded under this Australian Research Council Linkage grant: PhD student Ryan Falconer, with the support of the National Heart Foundation, explored how public transport choices in sub-divisions can affect the amount of active commuting (and related physical activity) undertaken by commuters; while PhD student Sarah Foster, supported by the Western Australian Department of Planning and Infrastructure, looked at how local walking habits are affected by real and perceived concerns about traffic and crime-related safety issues, and the relationship this has with urban design.

For more information on how your organisation might benefit from involvement with an ARC Linkage project, contact CBEH director Professor Billie Giles-Corti on Billie.Giles-Corti@uwa.edu.au.

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**Stepping up to public transport**

It seems that using public transport is not only good for the environment, but good for your health as well.

In 2006, the Centre for Built and Environment and Health asked 103 university students to strap on a pedometer for five days and measure the number of steps they took to get to or from uni. They also kept a travel and physical activity diary on each of these days.

As suspected, those who used public transport took more steps in a day than those who used private motor vehicles (around 1,000 more) and were much more likely to achieve the daily 10,000 steps recommended by health experts as a healthy activity level.

It appears that the walking associated with getting to and from public transport contributed to this greater total.

Up until this time, there had been no research comparing the physical activity levels of public transport users with those using private vehicles to reach their destination.

The research offers another positive message about public transport use that will be keenly received by transport planners, organisations promoting “green” transport policies and those concerned by the decline in physical activity associated with increased reliance on private vehicles.

**Principal researcher: Karen Villanueva**

**Contact details:** (08) 6488 8760 or kvillanueva@meddent.uwa.edu.au
that sedentary behaviour can have in older age — including increased risk of chronic disease and some cancers, obesity and Type 2 diabetes, depression and dementia. It can also increase the risk of falls and fractures. With this in mind, PhD student Andrea Nathan has been investigating what influence the location and design of retirement villages — an increasingly popular housing option for older Australians — can have on active ageing. She has recently finished collecting information on the activities and the views of more than 300 residents in 32 retirement villages located across the Perth metropolitan area and some 80 kilometres south down to Ravenswood.

Unlike previous studies in this area, Andrea’s research is also looking beyond the village gates to examine the influence that the surrounding neighbourhood environment can have on activity levels.

“Retirement villages provide for independent living, with access to communal social and recreational facilities, and most of the residents are still quite mobile,” she explains.

“I’ve been exploring what is provided within the villages to promote physical activity and social connections, but I’m also investigating factors within the surrounding built environment that support or discourage activity outside the village. This includes, for example, the availability of safe footpaths and walkways, access to public transport, and proximity to shops and services.”

The study is monitoring subjective and objective data to paint a full picture of the residents’ activity levels and possible barriers to activity. As well as reporting on their usual activities, participants were asked to wear an accelerometer (a device that measures how fast as well as how much they move) to measure the intensity of their activity. Similarly, a survey completed by participants will provide feedback on how suitable they think their local environment is in terms of supporting physical activity and this will be matched against geographic information system data that will enable the research team to create objective measures of what is actually available in the local neighbourhood.

“There’s not a wealth of information on how the built environment influences activity in older adults specifically,” explains Andrea.

“It makes sense to explore this issue within the context of retirement villages because here you’ve got a lot of older, still mobile people living in one area. We hope the study findings will be practical both in terms of the design and location of future retirement developments, but also in regard to retro-fitting existing facilities.

“But because the study also looks beyond the villages, the results should have broader implications, too. It will help us to understand the physical factors in local environments that encourage independent older people to get out and about.”

For further information contact Andrea Nathan Researcher, on 6488 8737 or ANathan@meddent.uwa.edu.au

Planning for an active retirement

As the Australian population ages, it will be important that our built environment encourages people to reap the health benefits of staying physically active and socially connected.

Thirty per cent of Australians are expected to be aged 60 or over by 2050 (as compared to 18 per cent in 2005), and public health professionals are well aware of the significant health consequences associated with greater physical activity in young children, but increasing park proximity to homes may require a variety of sizes within a community catering to different needs.

• Safety – ‘stranger danger’ concerns and worry about children encountering physical dangers such as used syringes and broken glass may discourage park use, so solutions could include improving natural surveillance by opening the park to the view of surrounding houses, and maintaining park equipment. If a park is used more often, it will also be seen as a safer place to be.

• Provision of facilities – large, grassed areas that allow room to run, playgrounds that promote use by children of all ages, physically challenging and interesting play equipment, safe walking and cycle paths, good lighting, the availability of fresh drinking water, accessible toilets, the inclusion of trees and water features and the provision of shelter, seating and tables for adults supervising children are some of the physical factors promoting increased use of parks.

For further information contact Dr Lisa Wood, CBEH Deputy Director, on 6488 7809 or lisa.wood@uwa.edu.au

Rediscovering our local parks

There is no doubt that the physical character of Australian childhood is changing, particularly in urban areas.

While their parents and grandparents may recount stories of pre-dinner hours spent freely exploring their neighbourhood on bike or on foot, the picture of out-of-school activity for today’s younger generation is often quite different.

Safety concerns, parental work schedules, travel requirements, the allure of television and other screen-based entertainments and higher density living are just some of the contributors to our children spending more time inside and in cars and less time enjoying free play with their friends in backyards or down at the local park.

Sadly, it’s not just the social picture that’s changing: the lower levels of physical activity associated with this more sedentary lifestyle mean that children are at greater risk of obesity (25 per cent of young Australians are expected to be obese by 2025 if current trends continue) and of adverse health consequences in later life, including heart disease, high blood pressure, diabetes and some cancers.

The good news, however, is that local parks still offer a very accessible means of increasing our children’s physical activity, as well as providing social interaction and contact with nature that can benefit their mental health. So, how do we maximise use of these parks and their potential health benefits?

CBEH’s Dr Lisa Wood was commissioned by the Australian Research Alliance for Children and Youth (ARACY) to investigate this issue, resulting in the release of a recent report, Parks and Open Spaces: for the health and wellbeing of children and young people examines the many factors that can influence children’s use and enjoyment of parks. Some of the major design issues highlighted in the report include:

• Park location and accessibility – the closer parks are, the more likely they are to be used, so ideally they should be within a five minute walk or 400 metres from the furthest house in the neighbourhood, with good connecting paths and roads and safe crossings.

• Size – large surface areas (ovals and larger parks)
by the Australian Government’s Department of Health and Ageing. It provides practical tools, case studies and guidelines for planning and designing healthier communities around the movements of people, not just cars, and is targeted at planners, design professionals, health professionals, the property development industry and governments, as well as individuals and organisations interested in more active living. The Healthy Spaces and Places website (www.healthyplaces.org.au) is supported by an 18-page hard copy publication that summarises the information contained in the web site.

**Position statement: The built environment and walking published by the Heart Foundation (2009)**

Centre director Professor Billie Giles-Corti and PhD student Sarah Foster were members of the Heart Foundation’s National Physical Activity Advisory Committee writing group that authored this document. It summarises the different features of the built environment that influence walking for recreational and transport purposes and discusses some of the issues surrounding the planning of new neighbourhoods, and the retrofitting of existing neighbourhoods, to encourage walking. It also puts forward recommendations for action by different sectors of the community to promote walking for better health as part of a whole-of-community approach. This includes strategies for the health sector, governments, urban and transport planners, land developers and individuals. The document can be found on the Heart Foundation website (http://www.heartfoundation.org.au/SiteCollectionDocuments/Built_environment_position_statement_FINAL_LR%20for%20web.pdf).

**Useful resources**

Team members from the Centre for the Built Environment and Health have recently contributed to some Heart Foundation policy guidelines that readers may be interested to access.

**Healthy Spaces and Places: A national guide to designing places for healthy living (2009)**

This project is a unique collaboration between the Australian Local Government Association, the National Heart Foundation of Australia and the Planning Institute of Australia, funded by the National Heart Foundation of Australia, the Australian Local Government Association, the Planning Institute of Australia, funded by the National Heart Foundation of Australia, and the Planning Institute of Australia.

**Meet our Advisory Board**

A stakeholder Advisory Board chaired by Mr Evan Jones, General Manager Planning, Multiplex provides advice to the Director and assists in the development and translation of research at the Centre for the Built Environment and Health. Mr Jones was previously responsible for the development of the WA Planning Commission’s Liveable Neighbourhood Guidelines. The Advisory Board includes key external and internal stakeholders:

- Dean of the Faculty of Architecture, Landscape and Visual Arts, UWA, Professor Simon Anderson;
- Chief Executive Officer, WALGA, Ms Ricky Burges;
- Health Promotion Director, Healthway, Dr Jo Clarkson;
- General Manager, Business Development & Marketing, LandCorp, Ms Kerry Fijac;
- Deputy Head of School, School of Population Health, UWA, Professor Elizabeth Geelhoed;
- Director, Centre for the Built Environment and Health, UWA, Professor Billie Giles-Corti;
- Executive Planner, Special Projects, Department for Planning, Mr Charles Johnson;
- Director, Hames Sharley, Mr Warren Kerr;
- Manager, Population Health Policy Branch, Department of Health, Ms Sue Leivers;
- Chairman, WA Planning Commission, Mr Gary Prattley;
- National Physical Activity Manager, Heart Foundation, Mr Trevor Shilton; and
- Partner, Minter Ellison, Ms Margie Tannock.

**Upcoming events**

**Anniversary event and Friday Forum**

To celebrate our recent two-year anniversary in November, Advisory Board member and Chairman of the Western Australian Planning Commission, Mr Gary Prattley is hosting a Friday Forum in February to highlight the Centre’s research. In this talk, the Centre’s director will reflect on how can we build Perth in a healthy and sustainable way to meet the needs of a growing and ageing population.

For example, if we need to intensify land use, how should we do this to maximise health outcomes and minimise harm, particularly to vulnerable groups such as children and the elderly.

**Date:** Friday 26 February

**Venue:** Urban Design Centre, Albert Facey House, 469 Wellington Street, Perth

**Time:** 4.45pm-6pm

**RSVP to:** Dave Dolby david.dolby@planning.wa.gov.au or 9264 7506

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