


universal
design
CONFERENCE

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List of Abstracts

Keynote: From Barrier-free Accessibility to Universal Design – The Singapore Experience

Presenter: Ms GOH Siam Imm

Abstract: Singapore, a city state, has evolved from an Island with slums in the 60s to today's high density urban city. The first step taken towards creating a barrier-free built environment goes back as early as the 1980s with the provision of *barrier-free accessibility in buildings* made mandatory in 1990 under the Building Control Regulations. With a fast ageing population and a need for an inclusive built environment to support ageing-in-place, it was important to take stock and review the adequacy of the prevailing policies and provisions. The Accessibility Master plan was developed and implemented to address the accessibility issues of the past, present and future. Going beyond barrier-free accessibility, the Building Construction authority has also step up the drive to adopt Universal Design in the design of buildings and public spaces. The presentation will also show how the BCA UD Mark Certification Scheme has encouraged the developers and designers to adopt the user-centric philosophy in the design of the built environment.

Bio: Ms Goh Siam Imm, a Registered Architect, is the Technical Director of Universal Design (UD) Department which developed and implements the Accessibility Master plan in Singapore. In addition to her previous role as a regulator in Building Control and Fire Safety, she had more than 10 years of architectural practice in both private and public sectors. Having the opportunity to work with persons with disabilities, she is very passionate about promoting UD to create an inclusive society. She is actively involved in the development of Codes and National Standards. In the last ten years as Director of UD Department, she had developed UD guides and chaired the multi-agency Committee in the review and development of the 2007 and 2013 editions of the BCA's Code on Accessibility in the Built Environment.

Keynote: Beyond the Front Gate: Universal Mobilities and the Travel Chain

Presenter: Professor Simon Darcy

Mobility and mobilities are terms with multiple meanings across different disciplinary divides. This keynote presentation will examine the concepts of universal design and mobilities across the travel chain. The presentation will be founded in the articles of the United Nations (2006) *Convention on the Rights of Persons with Disabilities* and examine the implications of "universal mobilities" across personal, local, regional, national and international travel. In doing so the presentation examines the

intersections of disability, support needs, life-cycle and lifespan. The presentation will draw on examples that highlight independent, dignified and equitable approaches to designing local, regional, national and international movements of people encompassed by the UN Convention.

Bio: Simon Darcy specialises in developing inclusive and universal organisational approaches for diversity groups. His research has spanned a variety of contexts including sport, tourism, events, volunteers, transport, the built environment and disability services. Simon has held grants with the Australian Research Council, Sustainable Tourism Cooperative Research Centre, the United Nations, and has carried out research for business, government and the not-for-profit sectors. His research and industry collaboration on accessible tourism and social inclusion has been recognised for its outstanding contribution to the field through the World Leisure Organisation's Innovation Prize and the United Nations World Tourism Organisation 2015 publication on best practice. Simon is actively involved in changing business, government and the not-for-profit sectors practice through implementing the outcomes of his research. Simon's credentials include Ph.D, MEnvPlan, BA; Professor – Management; Co-Director Cosmopolitan Civil Societies Research Centre

Keynote: Communicating Universal Design Across Virtual and Built Environments

Presenter: Professor Gerard Goggin

Abstract: If we are interested in better, more inclusive, fairer design, use, and benefits of our environments, society, and, especially, technology, then communication is key. This is especially the case if we seek to address the epochal challenge of taking universal design from the margins to the mainstream. So what's involved in communication and universal design? Where does communication fit into universal design? And, armed with more inclusive communication and media, how can we communicate more effectively, more broadly, and with more influence concerning universal design?

In this talk, I give an overview of the state-of-the-art of universal design in communication. I pay particular attention to the transformations in communication and media that digital technologies represented. With the advent of the Internet, social media, mobile phones, tablet computers, and associated technologies, digital technologies are embedded in many (most) people's everyday lives.

Access, affordability, skills, and literacy in digital technologies are increasingly required in our cities, rural, regional, and remote areas, for people to engage in education, do basic citizen activities, gain government services, access social support (for instance in disability services, aged care, or welfare), connect with friends, families, and intimates, participate in politics, work, and many other things. So: what's the story with universal design in these essential and other areas of communication? Are technology companies – including the global players we rely upon, for instance, in the social media area – implementing universal design? What of initiatives such as web accessibility, or universal design in mobile phones? What about the accessibility of content and information across traditional communications forms as well as new digital media formats? What are the roles, and track records, of the different levels of government in Australia? What are the other players involved, and how might we improve things?

And what of the emerging issues where our 'virtual' and 'built' environments are now converging and crossing-over? If we struggle with inclusive and universal design in our current cities, how can we ensure 'smart cities' are built, from scratch, on universal design principles? What about the new frontiers in transportation systems, from 'sharing economy' platforms and services (such as Uber) through driverless cars to reconfigured public transportation? Communication, especially through apps and digital platforms, plays a crucial role in these new, hybrid virtual/built environments, but as

yet universal design is not well understood or embedded in the templates for conceiving and creating our future environments. These issues of universal design in the dynamic area of digital technology helps us frame and address the issue of how we take our communication about universal design to 'the next level', taking it mainstream, as it were.

Bio: Gerard Goggin is Professor of Media and Communications at the University of Sydney. He is also an Australian Research Council (ARC) Future Fellow, researching disability, digital technology, design, and human rights. Gerard is author of various books on media, communication, and technology, including: *Routledge Companion to Global Internet Histories* (2017; with Mark McLelland), *Disability and the Media* (2015; with Katie Ellis), *Locative Media* (2015; with Rowan Wilken), *Global Mobile Media* (2011), *Cell Phone Culture* (2006), and, with Christopher Newell, *Disability in Australia* (2005), and *Digital Disability* (2003). Gerard also has a longstanding involvement in civil society and NGOs organizations, working in the communications advocacy and policy area, being a founding board member of the Australian Communications Consumer Action Network (ACCAN).

Keynote: Universal Support for Universal Design

Presenter: The Honourable Kelly Vincent

Abstract: The South Australian Upper House has supported amendments to the Planning, Development and Infrastructure Bill that will increase accessibility for everyone. The amendments mean that South Australian developers will be required to consider universal design principles in their proposals. Long overdue, this is an Australian first. A walk through city and suburban streets shows why we need to promote best practice in access and inclusion planning. Ramps that are too steep, and road crossing ramps that don't line up are not just inconvenient, they also pose safety risks. Any costs involved in retro-fitting basic infrastructure are offset by greater accessibility of public spaces meaning more people can get out and about safely and conveniently. Mandatory compliance monitoring for access features is required in the same way as food safety or work health and safety inspections. Too many "mistakes" are made and not picked up and corrected and the assumption is that "near enough is good enough". But the built environment is only the start. Transportation systems, housing design, tourist destinations, employment and education all need universal design principles applied to them.

In this presentation I will outline the processes that got the Upper House to the point of support and agreement, and how the barriers and arguments against this move were overcome. The more we as a society, as policy-makers, and at all levels of government learn about the social and economic imperatives of real inclusion of all people, the more incumbent it is on us to find ways to enable that inclusion and participation.

Bio: The Honourable Kelly Vincent is a trailblazer, she's the youngest woman ever elected to an Australian parliament, the first to be elected on a disability rights platform and she is Leader of Dignity for Disability in the South Australian Legislative Council. First elected in 2010, Kelly championed many issues - her work led to the establishment of SA's Disability Justice Plan, and among her many other achievements she recently established a committee to enquire into the educational experience of students with disabilities in South Australia.

Kelly's previous life was in professional playwriting and performance and she's an active patron of the South Australian Arts community. In 2014, Kelly was listed in The Adelaide Advertiser's inaugural *Young Guns - Ones to Watch* guide, and also in their International Women's Day list of South Australia's Most Influential Women. Kelly was a 2015 finalist in the Daily Life ANZ Women of the Year awards. Kelly Vincent is in demand as a speaker and has spoken at conferences interstate and overseas, and she appears regularly in the media. On a daily basis, through her work as a

parliamentarian, Kelly Vincent is contacted by people in crisis – often due in part to the disproportionate amount of time people with disabilities have to spend battling with bureaucracy simply to gain fair access to the world others take for granted. Kelly says her goal is to make herself redundant, and she says this goal will be realised when having a disability in Australia no longer constitutes a full-time job. Kelly Vincent is a prominent and respected advocate for people with disabilities, and their family carers in the South Australian political landscape. She supports radical change in the way the needs of people with disabilities are met, believing that attitudinal change is the key.

Master of Ceremonies: Nick Rushworth

Nick Rushworth has been Executive Officer of Brain Injury Australia since 2008. He was also President of the Brain Injury Association of New South Wales between 2004 and 2008. In 1996, Nick sustained a severe traumatic brain injury as a result of a bicycle accident. Before joining Brain Injury Australia, Nick worked for the Northern Territory Government setting up their new Office of Disability. Formerly a producer with the Nine Television Network's "Sunday" program and ABC Radio National, Nick's journalism has won a number of awards, including a Silver World Medal at the New York Festival, a National Press Club and TV Week Logie Award.

Concurrent Session Speakers

Title: Progress on the National Dialogue on Universal Housing Design

Presenter: Dr Margaret Ward

Abstract: In 2010 the National Dialogue on Universal Housing Design was a gallant initiative by the former Labor Government to improve the supply of accessible housing in Australia. It sought the goodwill of community, human rights and housing industry leaders to agree on a national guideline and a plan to change housing design and construction practice voluntarily. It differed from previous voluntary initiatives by committing to measurable targets which were then endorsed by the Council of Australian Governments in the 2010-2020 National Disability Strategy. Five years on, community groups across Australia have seen little change in the practices of housing providers, and have realised they have been sold a lie. The words succeeded to convince the stakeholders that action would happen—but the policy failed. The Australian Network on Universal Housing Design with Rights and Inclusion Australia anticipate that less than 5% of the 2020 target will be achieved. In the next five years, the housing industry is likely to continue business as usual; voluntary change without clear market gain has rarely succeeded in the past. The Australian Government will make one of two choices: they will ignore the National Dialogue agreement and the commitment in the National Disability Strategy, or they will provide for access to housing within the National Construction Code. The responsibility for action will fall on those most affected, people who are marginalised and made more vulnerable by poor housing design. This paper outlines the activities of these groups to date, who have aligned with the goal of inclusive housing, who has impeded action, and what are opportunities for change and the likely outcomes in the next five years.

Bio: Dr Margaret Ward is a Research Fellow at the School of Human Services and Social Work, Griffith University in Brisbane, Australia. She completed her doctoral thesis on inclusive housing in Australia at the School of Design at Queensland University of Technology, Brisbane. Dr Ward is currently convenor of the Australian Network for Universal Housing Design. Originally a practicing architect in the area of

housing, she was a parent of a person with disability and as a consequence, has had a varied career as a policy writer, service provider and advocate in the areas of social inclusion, housing and disability.

Title: Universal Housing Design - The New Zealand Story

Presenter: Helen James

Abstract: This presentation looks at how voluntary universal design standards were introduced into New Zealand through the Lifemark brand. The barriers, issues and challenges facing Lifemark will be presented along with the strategic approach to business development, language, sales and consumers that has resulted in over NZD 1 Billion worth of residential buildings achieving Lifemark certification and a further Billion dollars already agreed with major private sector developers. A consumer advertising campaign, consumer scoring tool and review of social media initiatives will also be presented in this case study review. Formed in 2006, Lifemark has over 100 members consisting of architects, group home builders, developers and retirement operators and certified just over 2% of all residential building consents in New Zealand in 2015. Lifemark is a not for profit agency that offers a voluntary certification system to the private and social sectors and provides an advisory and rating service to deliver more accessible residential housing designs.

Bio: Helen James joined Lifemark in 2015 and works closely with accredited members and new product partners. Helen worked with BCI New Zealand for 5 years as senior business development manager and was a key account manager with 3 M.

Title: STEP Up – shape your space

Presenter: Abigail Elliott

Abstract: ‘STEP Up – shape your space’ is an online training program for recreation centre staff that work in YMCA Victoria programs and facilities to ensure all community members feel welcome and included. The training has been designed using a Universal Design framework to ensure the needs of all people no matter their age, income, gender, ability, culture, religion or sexual orientation are considered. The Universal Design principles have been imbedded in the elements of the STEP acronym which stands for Space, Task, Equipment and People as a way of supporting staff to consider the elements required to make programs fair and encourage the highest level of independence for all centre users. The training uses Universal Design in a unique way as it focusses on program delivery and human interaction rather than facility design. A user centred approach has been used throughout the design of the training with real centre members being included in training videos and content development. STEP Up is an excellent example of simplifying the Universal Design principles so they are easy for recreation centre staff to put into practice and change their thinking around proactive inclusion rather than reactive inclusion. This presentation will highlight the challenges, highlights and knowledge gained in developing an online training program which has utilised Universal Design in content, delivery and style. It is useful and relevant for those wanting to explore sharing and adapting the 7 principles of Universal Design from theory into practice for those working in the community.

Bio: Abigail Elliott is Manager of Community Development at YMCA Victoria and manages a team who aim to provide access to sport and recreation for various groups who may experience barriers or have different support needs. This includes people with disabilities, older people, single parents, people who experience mental health issues and those from various cultural backgrounds. Prior to this Abigail worked mainly in the health sector in a variety of roles including the executive officer at the

NSW Association for Adolescent Health, program coordinator for a youth leadership program at Family Planning Victoria, and as an occupational therapist in a range of settings.

Title: “Design for Everyone” Guide and the application of universal design principles to active recreation infrastructure.

Presenter: Evan Wilkinson

Abstract: Design is powerful and profoundly influences our daily lives and our sense of confidence, comfort and control. Universal Design allows everyone, to the greatest extent possible, and regardless of age or ability, to use buildings, transport, products and services without the need for specialised or adapted features. Where conventional design caters for the ‘average’ person, Universal Design recognises that people have a range of capabilities. It can ensure and enable all people to access the buildings, services and experiences that most of us take for granted. It helps to provide more inclusive facilities rather than relying on minimum standards prescribed in building codes. When implemented effectively Universal Design can underpin social inclusion and can be applied holistically to the built environment to encourage design that provides maximum amenity for the maximum number of people. Sport and Recreation Victoria is playing a leading role in the application of Universal Design Principles across community sport and recreation infrastructure and facilities to enable and empower a diverse population by improving human performance, health and wellness and social participation. This presentation will provide a practical, insightful and informative discussion about the release of Sport and Recreation Victoria’s Universal Design Guide, “Design for Everyone” and its benefits as a design tool for practitioners. This on-line guide is an innovation ‘first’ for Australia, providing sport and recreation facility planners, designers and operators with practical information and resources of how to apply the philosophy of Universal Design to a variety of diverse facilities and settings. The application of Universal Design thinking and principles into active recreation infrastructure and spaces such as play spaces, multi-use courts and skate parks that cater for a range of users and abilities will also be discussed to show how it can lead to more active and engaged communities.

Bio: Evan Wilkinson is a Planning and Infrastructure Coordinator for Sport & Recreation Victoria, working with local councils in Melbourne’s Metropolitan North and West. Part of Evan’s role is to provide design advice and support to councils who are delivering a range of sport and recreation facilities as well as recreation planning projects that receive investment from State Government. He works closely with councils to apply a consistent Universal Design overlay to these projects to ensure they will be flexible and can be used by all people. Evan’s understanding of sporting facilities is informed by previous roles working on major projects in SRV’s State Facilities team. ,

Title: Hearing Matters

Presenter: Les Goding

Abstract: One in every six of all Australians (approximately 4 million people) have varying degrees of hearing loss. Add to this the ongoing aging of our population and it is certain that the current figure will increase substantially over coming years. This presentation is directed to all involved in building access issues; that is architects, consultants and constructors. The aim is to increase awareness of the need to meet standards set to address speech/audio access in buildings, for those who have a hearing problem. It also defines the many causes of hearing loss to provide attendees with a better understanding of the associated issues. Unfortunately the mandatory requirements of the Disability Discrimination Act (DDA 1992) and subsequent AS 1428.5 are not always known by those within the

above disciplines. This creates an access gap in many projects, both large and small, and subsequent discomfort for those with hearing impairment. This will be addressed during the session. The presentation will also detail relevant application of assistive listening facilities in public buildings eg: conference venues, boardrooms, hospitals etc. Not only will these issues be addressed, but also the technical aspects of assistive listening equipment will be explored. Finally, Induction Loop design concepts will be introduced by visual introduction of a new web-based design program. This has been developed to clearly simplify and verify even the most complex space requirements.

Bio: Les Goding has focused on this specialised field for 20 years. During this time he has undertaken numerous design projects covering a wide range of applications including large concert auditoria, aged care facilities, airport terminals and numerous other relevant spaces. Les continues to consult on assistive listening designs.

Title: Easy English: An integral part of Universal Design

Presenter: Cathy Basterfield

Abstract: Have you ever wondered what the side effects of a new medication are? Do you enjoy planning your new holiday? Do you check your insurance policy to know what happens when water comes through the roof? Do you check out the gig guide for the latest band? All these tasks require literacy, and for many, also access to the internet to find more information or complete an online form. In today's changing and fast paced society, literacy is an important aspect of how we all access our world. Now imagine you are one of the 44% of the Australian adult population with non-functional literacy (ABS,2013). It is 10 years since the United Nations Convention on the Rights of Persons with a Disability (2006) was enacted. There are specific Articles in the Convention which identify access to information. But, in real terms what does this mean for people with non-functional literacy? Easy English needs to be considered as an integral part of universal design for meaningful inclusion and participation. This paper will:

- present some case studies of how Easy English has been introduced to improve access and inclusion for people with non-functional literacy;
- use personalised stories to explain the enormous impact to have access to Easy English for people with non-functional literacy;
- discuss the types of information these people would like to be able to read, understand and use on a day to day basis;
- show key elements to include in a quality Easy English document;
- enable you to reflect on the written materials your organisation currently develops.

Delegates can then begin to plan Easy English in the development of their written materials, both printed and online to make written information accessible for the 44% of the adult Australian population with non-functional literacy.

Bio: Cathy Basterfield is an experienced Speech Pathologist, with a background of 28 years working with people with Complex Communication Needs and Easy English. Cathy was awarded a Victorian Government Ethel Temby scholarship for an investigative study into international trends and accreditation for Easy English writing and publications in 2011.

Title: Inclusion inside the iconic sails of the Sydney Opera House

Presenter: Jenny Spinak

Abstract: The World Heritage listed Sydney Opera House has posed many physical access limitations. Nevertheless a culture of inclusion and access for patrons and visitors of all ages and abilities has overcome many of these limitations. This presentation will discuss how the issues were managed in the context of the history of the building, contemporary building codes and standards and the strategic approach to embedding a culture of inclusion and access within the organisation and its programming. Key lessons, achievements and challenges will be provided as well as insights into the ways in which people with disabilities can now more fully participate in world class performing arts experiences.

Bio: Jenny Spinak, BSW, has been working in the field of disability access for over 15 years, working with businesses, local government and arts industry to improve access for people with disabilities. Since 2006, as the Sydney Opera House's Accessibility Manager, Jenny has overseen large scale physical access improvements and introduced a range of accessible services and experiences for people with disabilities. Jenny's work in the area of accessibility has helped to foster greater inclusion for people with disabilities in the life of the Opera House, which recently won a NSW Government Green Globe award, recognising its leadership in social sustainability, including its access programs and initiatives.

Title: Angelman Syndrome - how can the built environment offer inclusion?

Presenter: Lindsay Perry

Abstract: The paper aims to highlight the needs of individuals with Angelman Syndrome within the built environment as a means of maximising inclusion and promoting quality of life. Collaborative relationships between home, school and disability services lead to higher academic achievements, positive attitudes, improved behaviour and more successful intervention programs. If we consider inclusion in terms of the built environment rather than interventional programs, the following four clinical features of Angelman Syndrome can be considered important with regard to inclusion and participation: mobility; severe developmental delay / intellectual disability; limited self-help skills; and seizure activity. In terms of individuals with Angelman Syndrome and the broad range of disability types associated with the condition, all aspects of the built environment need to be considered. While planning regulations / legislation aim to promote accessibility in the built environment, discrimination is still a reality. The paper will discuss how the built environment can be designed to be sympathetic to the inherent needs of individuals with Angelman Syndrome and in turn improve quality of life and participation in the community through simple features.

Bio: Lindsay has over ten years' experience as an access consultant and has worked on a wide range of projects. Her interest in accessibility issues started while at university and most projects she has worked on throughout her career have concerned access for persons with disability. She is an accredited access consultant, registered architect and holds a Master of Disability Studies. She is committed to ensuring that accessible environments are created that will improve the quality of life for the community as a whole, considering a wide range of disabilities in her work.

Title: Beyond ramps and signs: design for neurodiversity

Presenter: Emily Steel

Abstract: There is no 'normal' brain, but differences in how people perceive, think and act are predominantly considered as impairments or deficits that require fixing or, at least, management. The concept of 'neurodiversity' gives us an opportunity to apply universal design principles and investigate

opportunities for mediating environments instead of individuals. The wiring, or neural pathways, of people's brains begins before birth, but is dynamic across the lifespan, responding to illness (e.g. meningitis, vascular dementia), injury (e.g. stroke, motor vehicle accident), and various external stimuli. Universal design principles have been effectively applied to support people with limited sensory perception (e.g. people with low or no vision, people who are hard of hearing), but to be truly 'universal', our designs should also accommodate people with sensory sensitivities (e.g. dyslexia, ADHD, dementia, autism, bipolar). This session will explore places, products and communication strategies that present barriers and facilitators to inclusion for a neurodiverse population. It will highlight the value of evaluating 'usability' for individuals, as opposed to the 'accessibility' for populations. It will also provide examples of inclusive research and co-design that provides a means of building empathy and knowledge that can contribute to inclusive design and communication strategies. The session will also prompt discussion and debate about health and wellbeing in home, work and community environments that are increasingly hyper-stimulated.

Bio: Emily Steel is an occupational therapist advocating for inclusive design in the physical, social and virtual dimensions of our communities. She is completing a PhD focused on choice, equity and efficiency in assistive technology provision. Current voluntary roles include serving as a Director of Rights & Inclusion (RI) Australia, Australian delegate for Working Group 10 (Cognitive Accessibility) of the International Standards Organisation (ISO) Technical Committee 173, and Occupational Therapy Australia member and delegate for the Standards Australia Committee ME067: Assistive Products for Persons with a Disability.

Title: Tactile Street Name Signs - A Potential Universal Concept

Presenter: John Evernden

Abstract: We have no universal language but we do have some universal assistance in the form of symbols and pictograms or Braille to help us find a destination or facility. It is therefore not possible to have universal text on street name signs, although their design and location could be universally adopted. The City of Sydney is currently erecting 2,000 Braille and tactile street name signs on traffic signal poles throughout its entire area. The signs carry the street name and property numbers in white text on a black background, and are fixed at a standard height, where they can be easily found and touch-read by people who are blind, or read at close range by people who have low vision. The signs have proven to be useful for people who have a speech or hearing impairment, as they provide a measure of dignity and independence without the need to seek help. For example, a person who is deafblind is now able to navigate a path of travel around the City of Sydney without having to rely on personal assistance. This paper outlines the development of the signs and explains how the concept could be adopted by any city in the world.

Bio: John Evernden is an Accredited Disability Access Consultant with Degrees in Civil Engineering and Ecotourism.

Title: Designing Streets for All: Policy and Practice

Presenter: Linda Martin-Chew

Abstract: One year ago, a team working in obesity prevention and based within the City of Whittlesea began a conversation with the planners and engineers about achieving slower vehicle speeds in new residential streets. Why? Slowing the traffic improves safety, and perceptions of safety, for people of

all ages and abilities. People are more likely to get out and about, to meet each other in the street, to walk and cycle to local destinations. During initial discussions across Council, it became apparent that design was the critical tool to deliver success for the project. Design, done well, could achieve agreement and compromise among the many regulatory, technical and political factors that contest for space in our streets. Our objective was to create streets that positively influence human behaviour and are easily understood by everyone. Slower vehicle speeds in residential streets meet the major policy priorities of transport, urban planning and health professionals - but in practice, the initiative has rarely been attempted in the outer suburban areas of Melbourne. Rather, we have continued to develop new residential estates that prioritise vehicle movement and, as a direct result, disadvantage or discourage people movement. Now, City of Whittlesea is developing a socially progressive policy that will guide our practice in designing new streets, as well as the elements of the adjacent land use and development that influence behaviour. The project has required a collaborative approach to plan for the various technical and regulatory issues that are encountered throughout the “life” of a street. Over the next few months, we must seek to also overcome the political barriers. Whether we succeed or fail, the journey we undertake will be richly informative for anyone else seeking to implement a universally designed built environment, with significantly positive impacts on the health and wellbeing of residents.

Bio: Linda is an urban planner with eight years of local government experience. At City of Whittlesea, Linda worked in growth area planning for three years prior to being seconded to Council's health department to promote the use of Heart Foundation Healthy by Design principles in the organisation's policy and practice.

On the Dunny Run: Accessible public toilets in Tweed Shire

Presenters: Una Cowdroy and Suzi Hudson

Abstract: The project demonstrates the importance of working in partnership with people with a lived experience of disability in undertaking access audits of Council infrastructure. The access audit of all designated accessible public toilets in Tweed Shire was a priority action in Council's Access and Inclusion Plan. Two members of Council's Equal Access Advisory Committee worked with Council's Community Development Officer Ageing and Disability to assess the toilets resulting in a schedule of works in 2016. The presentation focusses on the review process and the value of sharing technical knowledge and lived experiences for a practical outcome. The input from the community members highlighted systemic issues with toilet design and fittings as well as other barriers that needed to be addressed. The results have initiated many changes. The project has influenced thinking at all levels of Council, initiated other working partnerships and led to changes in protocols and processes.

Bio: Una Cowdroy and Suzi Hudson are Community Representatives on Council's Equal Access Advisory Committee. Una has served on the Committee for over 15 years. Suzi is also the President of Blind Citizens Australia Tweed River Branch.

Title: Universal Design: Not just another name for access

Presenter: Joe Manton

Abstract: The aim of the presentation is to raise awareness of the significant differences between ‘access’ and ‘universal design’. It will highlight the importance of this difference, as well as provide examples to support an effective understanding for practitioners and encourage them to adopt

universal design, rather than minimum compliance requirements for access. Unfortunately there is a growing trend for people to replace the word 'access' with 'universal design' without really understanding the principles of universal design. There is a vast difference between access, *which is based in minimum legislation and standards for people with disabilities*, and the principles of universal design that support usability by everyone. This is having a detrimental effect on the adoption of universal design as a fundamental philosophy and framework, as many organisations are starting to 'benchmark' universal design against minimum access standards, thus limiting the opportunity for everyone to be able to effectively use buildings and facilities. There is a real risk, that if an awareness of what UD really is, and the significant opportunities that are afforded to the whole community by adopting the principles of UD, that there will be no change to the limitations placed upon buildings and facilities due to compliance with only the minimum legislative requirements for access. There was no better demonstration of this than at recent conference, where a number of people, including Access Consultants, presented papers under the heading of 'UD' but proceeded to articulate examples of minimum compliance with access standards under another name – UD! This has the capacity to undermine a real movement forward with UD in this country. The next step is to take this work to broader industries that are planning and developing major projects and buildings so we can ensure they can be used effectively by everyone. There must be a strong message that UD is a way forward and minimum compliance is the way of the past.

Bio: Ms Joe Manton is the Director of the Institute of Access Training Australia. Joe has developed and directed a successful access consultancy company for more than 20 years, offering a wide range of services and training. She has been working with Sport and Recreation Victoria for the past 4 years on developing and progressing the understanding and uptake of UD, and has recently been contracted to develop and deliver the new LHA courses that are promoting the principles UD more effectively.

Title: [Moving from the margins: Embedding inclusive thinking in design education](#)

Presenters: [Nicholas Loder](#), [Dr Lisa Stafford](#)

Abstract: In Australia, people with disabilities across the age spectrum still encounter barriers to participation in the community because designed environments are not responsive to diversity. More needs to be done in design education to embrace and promote inclusive attitudes and universal design thinking to help address exclusion in everyday environments. One way to achieve this is by shifting design education thinking about disability from access compliance to more inclusive and spatially just thinking. Studies examining design education about disability has illustrated that designing for disability is often taught as accessibility and access compliance (Boys, 2014; Geoghegan, 2015, Harrison et al, 2015). Rarely are questions raised about why accessibility is needed in the first place (Harrison et al., 2015) or what social norms and stereotypes about users underpinned design decision that led to designed environment not being inclusive of an array of users (Boys, 2014; Geoghegan, 2015). Furthermore, studies have found that when Universal Design principles or inclusive attitudes are taught, they are not well embedded within full degree courses (Harrison et al, 2015). There are many ways design education can promote inclusion. Awareness-raising approaches is one such method, however, as it is still an emerging area, it is important to assess its effectiveness as an educational approach. This paper contributes to this discussion on education approaches in universal design via a pilot study of design students learning in Brisbane Australia. The presentation will

discusses to what extent student's attitudes and awareness towards designing for diversity alter or increase from their learning about social-spatial justice and inclusive design pedagogy, and what value does awareness-raising education have on student's learning about designing for diversity. Identifying the impact of inclusive design approaches on student's learning could help to shift it from the margins, and see it embedded within curriculum of design courses.

Bios: Dr Lisa Stafford, Lecturer (P/T) and Post-Graduate Co-ordinator - Interior Design, School of Design, Creative Industries Faculty Queensland University of Technology, Brisbane. Nicholas Loder, M. Built Environment, B.Arch., Grad Dip PSM, over thirty years architectural experience, now in State Government, social housing.

Title: Moving Beyond Access: Translations from Policy to Practices in Interior and Architectural Design

Presenter: Janice Rieger

Abstract: Ideas behind universal design have moved from the margins to the mainstream when it comes to designing for access to public buildings such as museums, town centres and schools. Access to space(s), on the most part, have been codified into, for example, Barrier Free Guidelines and Building Standards, that represent ways to create universally designed buildings that are meant to translate the ideas of disability into actual material spaces. Through a series of case studies at various museums in Europe and Canada, this paper critiques the intimate, yet somewhat elusive, relationship between policy and actual spaces. Our case studies involved interviews with the people involved in designing the museums (e.g., architects, project managers, interior designers and exhibition designers), in-depth analysis of the museum spaces, and an analysis of the policies that were used during the design of the museums. When analyzing our case study results, we specifically looked into how translations are made from policy to practice when people outside the norm (those with disabilities) were largely absent from the process. Most significant is the idea that diverse human experiences which are flattened and generalized into policies, will translate into an understanding that the spaces created fulfill the requirements, needs and expectations of a vast range of people. As such, the research reported here begins to unravel how disability and diversity are constructed and produced in design. Further to our critical analysis, we report insights that are gained through our research that have the potential to advance the ways that designers approach the creation of universally designed museum interiors. As such, this presentation promises to provoke design educators and practitioners into reflecting on how disability and diversity are represented and translated from policy to practice.

Bio: Janice Rieger is a Lecturer in the School of Design at QUT, Brisbane and a PhD Candidate at the University of Alberta, Canada. She has been working with people with disabilities for over two decades and has taught courses on Universal Design for over a decade. Megan Strickfaden is an Associate Professor in the Department of Human Ecology at the University of Alberta, Canada. She is in her twenty-fifth year of teaching and has hundreds of scholarly outcomes including publications, patents, designed products, exhibitions, and films. Her research looks into how environments and products support quality of life for people with different abilities including older adults and those with disabilities.

Title: Summer Foundation's inclusive model of housing and support for people with significant disabilities.

Presenter: Dr Di Winkler

Abstract: Over the past 5 years, the Summer Foundation has developed and refined an innovative model of housing and support for people with significant disabilities. Our unique model aims to demonstrate that the provision of good quality housing that is accessible and centrally located, improves quality of life and social inclusion, while decreasing reliance on paid supports and reducing life-time care costs. The aim of these demonstration projects is to influence policy and create systemic change. We will share our design objectives and showcase our first two housing demonstration projects in Inner-Melbourne VIC and the NDIS trial site in the Hunter Region NSW. These housing demonstration projects have 6-10 apartments for people with disability peppered throughout larger residential developments. An additional space onsite provides a base for disability support workers to provide 24 hours on-call support. The apartments are designed to achieve 'Platinum' level certification under the Livable Housing Design Guidelines. Rather than being highly specialized and institutional in style, the apartments are adaptable and accommodate a wide range of individual preferences and abilities. They are designed to accommodate family and friends staying over, or living with the person. Smart home and communications technology incorporated into the apartments allow tenants to live with greater independence and privacy, by having as much control over their home environment as possible. The sites are well located near accessible public transport, shops and services. Our long-term vision is that this model of integrated housing will be routinely included in all new medium and high-density residential developments throughout Australia. We will outline our plan to partner with government, community housing providers and developers to replicate and scale this integrated model of housing and support. We share the knowledge generated by these projects and will provide links to reports and videos.

Bio: Dr Di Winkler is an occupational therapist who has worked with people with severe brain injury for more than twenty years. Di was the Chief Occupational Therapist at Ivanhoe Manor Private Rehabilitation Hospital prior to working in private practice with people with brain injury. Frustrated at seeing young people in aged care and a lack of appropriate housing and support, in 2006 Di set up the Summer Foundation. The vision of the Foundation is that young people with disabilities and complex care needs will have inherent value as members of our society, with access to services and housing that support their health and wellbeing.

Title: Designing inclusive cities beyond accessibility by using a 7 Senses Design Approach

Presenter: Tobias Volbert

Abstract: The 7 Senses (smell, taste, touch, sound, sight, balance, and perception of body in space) approach to design is a simple yet versatile framework to improving a person's sensory engagement with outdoor and public space environments. Current design and accessibility practices rarely consider the requirements of people with non-physical disabilities. Despite the growing prevalence of neurological and mental health disability, there is no design guidance for best practice. The health and occupational therapy sectors better understand the barriers to participation and this knowledge needs to be translated to the design sector. 7 Senses is an adaptable approach that addresses this gap, whilst improving the design of built environments. In the last two and a half years, several events and case studies have been researched and developed to provide guidance to the built environment industry to consider the needs of all Australians in the design and redesign of outdoor and public spaces. The 7 Senses design approach provides insights to the design needs of people who experience neurological, intellectual and mental health disability and addresses their needs in the design of our cities. In addition, the approach benefits the carers and families of persons with disability who mutually

experience isolation and exclusion. This will result in greater all round participation for families on the fringe and provide opportunities for access and inclusion previously denied to them. Finally, there is significant 'all of community' benefit that results due the increased health benefits of reducing barriers to service access and social isolation. There is a growing demand for inclusive, multigenerational spaces and play spaces. This presentation will provide background information regarding the activities in Australia and the wider understanding of non-physical disabilities, sensory and motor development, and some statistics and trend data. The focus will be on the key elements of inclusive design beyond accessibility and access codes using examples for best practice success for sensory public spaces.

Bio: Tobias Volbert is a Landscape Architect educated in Hanover, Germany. In 2006 Tobias moved to Australia where he worked as a project manager for a sustainable buildings company in Brisbane, before beginning his current role as National Business Development Manager at Playscape Creations in 2011 and co-founded the 7 Senses Foundation in 2013. Prior to his move to Australia, Tobias was involved in change management, community consultation and landscape design projects in Germany, New Zealand and Australia. Passionate about sustainability and inclusive design beyond accessibility, Tobias has been publicly speaking about the merits of 7 senses design around Australia.

Title: Age'n'Dem Friendly Streetscapes

Presenter: Guy Luscombe

Abstract: With around 95% of older people opting to live at home as they age, and some 70% of people with dementia staying in their home environments, more needs to be done to enable aged and dementia (what we might call 'Age'n'Dem') friendly communities. The evidence supporting the benefits of walking for Age'n'Dem people is widespread and seemingly incontrovertible, but how do Government and policy makers use this information to practical benefit in the community? The evidence base, supported by more than ten years of research; has resulted in few 'end user' practical tools being developed. Moonee Valley City Council has a high percentage of older people. They received funding from the Victorian Government to develop a 'toolkit' to help Local Governments to implement more Age'n'Dem friendly streetscapes and encourage more walking. Based on available evidence and working closely with Council and their reference focus group, the toolkit developed guidelines and techniques to assist those tasked with the responsibility of looking after the public realm for increasingly Age'n'Dem communities. It was developed with four possible end goals in mind.

1. To inform various stakeholders about the importance of aged friendly streetscapes and how to create them
2. For use by Council staff and contractors when designing, constructing or upgrading new and existing infrastructure
3. For use an audit tool for existing streetscapes to guide improvement programs.
4. As a planning tool to guide development

The presentation will describe the process went through and show the end result.

Bio: Guy Luscombe is a Director of Architects Johannsen and Associates. An award winning architect, he has spent over twelve years focussing on how design can improve the built environment for older people. He has designed a multitude of projects for older people at all levels of need, written extensively on design and ageing and is a regular speaker at conferences and in the media on the subject. Most recently, he completed a Byera Hadley Travelling Scholarship to study innovative buildings for the aged in Europe entitled "The NANA Project: New Architecture for the New Aged".

Title: Aesthetics, Design & Disability: Towards a framework for collaborative design of assistive devices

Presenter: Cobie Moore

Abstract: The current default methodology for designing assistive devices has a medical and functional focus and does not take into consideration the emotional and psychological impacts of design and aesthetics. This research uses an analytical autoethnography methodology to explore my experiences with occupational therapy, design and as an individual with a disability. I provide a theoretical proposal for approaching issues related to design, disability and occupational therapy that has a focus on awareness of the cultural construction of stigma and how aesthetics can be used to create a positive emotional response. Assistive devices are the combination of design and disability. An ideal design solution for assistive device is perceived as one that allows an individual with a disability to perform tasks with equal effectiveness and ease as a person without a disability regardless of aesthetics. This design ideal ignores the psychological and emotional impact of using an assistive device, these impacts occur due to the aesthetics of the designed object not suiting the social environment in which it is being used. Through a literary study and a deconstruction of my own personal experiences I put forward a proposal for an alternative design structure involving the cooperation between three separate groups of people; individuals with disabilities, medical professionals, and industry professionals. The current structure for designing and making assistive devices involves an unequal partnership between an individual with a disability and a medical professional where the individual with a disability describes their wants and needs and the occupational therapist provides practical based solutions. I propose a change in the role of the occupational therapist from provider to co-worker allowing them to contribute their and medical expertise in collaboration with industry professionals, designers and people with disabilities creating a holistic approach to design.

Bio: My identity is comprised of two cultural constructions; first I am a design student and second an individual with a disability, specifically quadriplegia. Both of these cultural constructions have different ways of understanding and interpreting the world. As a design student I have a theoretical and practical understanding of the value and application of aesthetics in the conceptualisation and construction of designed objects. As a quadriplegic with significant physical limitations in my lower body and hands I am constantly challenged by the design and construction of the objects I come into contact with.

Title: Fashion Design at the Margins – Balancing Mainstream Expectation with Functional Need

Presenter: Dianne Hodge

Abstract: Fashion and clothing is something we experience every day. Most fashion design is aimed at a mainstream audience, as this lends itself to economy of scale and mass marketing. Designing for people at the margins, especially for those with a physical disability, represents a tension between function and mainstream expectations. Clothes not only give protection against the physical environment, but also provide a way to express ourselves symbolically and to communicate our personal, social and cultural identity. Surprisingly, although clothing is so central to our being, the garments themselves are often seen but not noticed. Most of us take for granted the availability and access to attractive, well-fitted and functional clothing. It is only when an individual has difficulty, such as with closures or fasteners or is unable to dress independently that we are forced to refocus again. Unlike products that have been designed using universal design principles, clothes are generally

designed for a stylised body shape using mass production techniques, which emphasises speed and price in manufacture rather than fit and lasting quality. People who are at the outer edges of the ideal body shape, find it near impossible to obtain the clothing they require and what is available is often uncomfortable, unattractive or too expensive and thus unsuitable. This approach to clothing design needs to be turned on its head, and consideration of the end user from the beginning, with the application of ergonomic and universal design principles applied at each stage of garment design and manufacture. This approach will be explored and illustrated with practical examples. Effective universal design in clothing garments is a small but important way to improve the quality of life for people not just those who have significant disabilities.

Bio: Dianne Hodge is an occupational therapist who has specialised in work rehabilitation. While assisting people return to work it became apparent that finding suitable clothes to wear following illness or injury was often a hidden barrier. After a move to Brisbane she began developing her clothing idea and undertook further training in fashion design. Now she is working on another clothing collection based on ergonomic and universal design principles, which is an exciting merging of occupational therapy and fashion. When she isn't designing or sewing she is busy undertaking her research degree related to the post discharge clothing needs of women treated for breast cancer.

Title: Should we do more in our Fire Engineering Assessments to Address the Ageing Population and Disability in Emergency Evacuation?

Presenter: Eliot Reeves

Abstract: When a Fire Engineer formulates an Alternative Solution there needs to be consideration of the people who are likely to use the space. Depending on the building, occupants will be of various ages, have differing mental capacities, may or may not have mobility issues or a range of other impairments. The Fire Engineer must therefore make a series of assumptions about the occupant's ability to respond to an emergency situation. Furthermore, the level of assistance available to occupants will vary from building to building and with the fire safety management systems that are in place. The Building Code of Australia does not specifically define the term '*disabled*' and provides limited guidance with respect to the evacuation requirements of such persons in an emergency. There are some provisions, such as additional fire and smoke compartmentation, for higher risk occupancies in hospitals and aged-care facilities which rely heavily on the training and actions of staff. But in general, no specific fire safety requirements are provided to cater for this increasing proportion of the population.

So do our Fire Engineering assessments and Alternative Solutions do enough to cater for the needs of an ageing population and disabled persons? How should we address the needs of these people now and into the future? Are these solutions universal and all-inclusive in nature? This paper provides a comparison between the case for current alternative solutions providing sufficiently for the needs of an ageing population and the case against current alternative solutions doing enough and outlines a way forward into the future.

Bio: Eliot Reeves is a Senior Associate and Accredited Fire Safety Engineer with Building Services Consultancy Norman Disney & Young. Eliot has practised Fire Safety Engineering for over eight years across a multitude of projects in building, critical infrastructure and transport projects. Eliot has a particular interest in all-inclusive design and works with stakeholders to provide for the fire and life safety of all occupants.

Title: Universal Design meets the Exit Sign

Presenter: Lee Wilson

Abstract: A critical part of planning for safe evacuations is providing clear wayfinding information for all occupants, with appropriate exit and emergency signage. This is currently not the case in Australia or overseas. In fact, the current approach to providing exit signs is very limited and does not consider the abilities or needs of all members of society. This can cause some people to experience confusion, or delays, or being directed to a non-accessible evacuation path during their evacuation. The initiative presents a solution to bridge this gap in current exit sign requirements and to help identify important accessible features that can be provided as part of enhanced evacuation strategies. This includes suitable signage to show accessible exit paths, safe refuge areas, emergency evacuation lifts and other evacuation devices in a consistent approach. This paper will present the case to support the use of these enhanced emergency and exit sign systems that adopt universal design principles. This approach is considered world's best practice and can help provide a much safer and more inclusive built environment for everyone. 'Universal Design Meets the Exit Sign' is an initiative of 'The Accessible Exit Sign Project.' The Project is an international awareness campaign that promotes the need for an accessible evacuation route from all workplaces, public buildings, and transportation.

Bio: Lee Wilson is a building specialist with extensive experience in accessibility, general building compliance and project management. Lee is an access consultant and an accredited member with the Association of Consultants in Access Australia and holds membership with various Australian and international organizations. As an advocate for universal design he has been actively campaigning for equal rights in terms of emergency evacuation provisions in buildings and has identified a gap in Australian legislation. Lee produced the first Australian guidebook on this topic in 2014 and started the international 'Accessible Exit Sign Project' to highlight the need for accessible exits.

Panel Session Speakers

Ro Coroneos is responsible for the Community and Social Strategy at Barangaroo South for Lendlease, which is a 10 year, \$6b urban regeneration project on the western foreshore of the Sydney CBD. She leads the delivery of 50 social programs, which includes the multi-award winning Barangaroo Skills Exchange, an onsite learning hub, in partnership with TAFE NSW, as well as the Barangaroo South Community Partnership - a cross-business collaboration with the major commercial tenants in the precinct, focusing on Indigenous engagement. Ro led the development of the Design for Dignity Guidelines, in close collaboration with the Australian Network on Disability and Westpac Group. In 2016, she was awarded the Lendlease Global Employee Excellence Award, for Diversity and Inclusion. Ro trained as a lawyer, land economist and corporate governance professional, and has over 25 years' public and private sector experience in the energy utilities and property sectors. Over the last few years her particular expertise has been in social sustainability. Ro is also director of the NSW TAFE Commission board. Ro will outline how an on-site literacy and numeracy program not only improved the company's bottom line, but also improved the skill level of trade employees.

Ms Sally Coddington has a background in business and marketing in Australia and overseas, and through her consultancy, Curb Cut Effect advises businesses about commercial solutions to empower people with disability. She has held various positions in the not-for-profit sector, including the Hunter Business Chamber, lectured at the University of Newcastle, and is currently a member of the NSW Disability Council. Sally will outline how companies are recognising market opportunities and beginning to develop ways to communicate and build brand loyalty with people with disability. These

organisations understand that people with disability want staff with practical skills who can deliver exceptional customer service and speak to them directly. The global market for people with disability is close in size to China, and together with friends and family, they control over USD 8 trillion in disposable income. More than one third of Australian families have a member with a disability: 70% socialise or relatives at least once a week, 40% eat at a restaurant at least once a week, and 23% go to department stores or shopping centres at least once a week.

Paul Nunnari has worked extensively across all levels of government on the development and implementation of their disability reform strategies. He is Manager of NSW Event Access and Inclusion at the NSW Department of Premier and Cabinet. Paul works directly with the event organiser and other government and non-government event planning agencies to coordinate strategies which are most conducive to increased participation. Some of these strategies include better transport and communication options, better disability awareness training for event staff and an increase in access considerations to events like accessible viewing areas, captioning and audio description. He has worked on several major events such as, Sydney NYE, Vivid Sydney, and the City to Surf. Paul is a former Paralympic athlete, NSW Don't Dis My Ability Ambassador and has served on several Boards within the disability sector. He is currently Chair of the City of Sydney Inclusion (Disability) Advisory Panel. Recently Paul provided input into the NSW Implementation Plan 2012-2014, the NSW Disability Inclusion Bill 2014 and the NSW Disability Inclusion Action Plan guidelines 2015.

The Hon Kelly Vincent is the first South Australian politician to be elected on the platform of disability rights. As representative of the political party Dignity for Disability, Kelly has successfully argued in Parliament the cost-neutral case for universal design because it increases amenity, safety and convenience for everyone. Refer to the keynote information for more about Kelly's background.

Session chairs

Margaret Kay is the Strategy Manager, Social and Community with Local Government NSW and is responsible for advocating for local government in the development and implementation of social policy in NSW. Margaret has more than 20 years' experience in strategic planning and research in a range of social policy areas, including 10 years in Ageing and Disability. She has worked with a not for profit aged care provider as a research analyst and has worked as an independent consultant in strategic planning in the areas of housing, education and energy efficiency. Margaret has a Bachelor of Town Planning (Hons) and a Masters of Commerce from UNSW.

Dee-Dee San Jose is Senior Policy Officer – Ageing and Disability with Local Government NSW.

Nicholas Loder's qualifications are M. Built Environment, B.Arch., Grad Dip PSM, and he has more than thirty years architectural experience. He is now in NSW State Government, social housing. Nick is also presenting a paper with Lisa Stafford.

Emily Steele is completing a PhD focused on choice, equity and efficiency in assistive technology provision. Current voluntary roles include serving as a Director of Rights & Inclusion (RI) Australia, Australian delegate for Working Group 10 (Cognitive Accessibility) of the International Standards Organisation (ISO) Technical Committee 173, and Occupational Therapy Australia member and delegate for the Standards Australia Committee ME067: Assistive Products for Persons with a Disability. Emily is also presenting a paper.