

Architecture turns a new leaf

Two new hospital designs incorporating natural and artistic environments have put Australia at the forefront of medical architecture, writes **Liza Power**.

THE healing power of nature is a phrase that means different things to different people: the calming ebb and flow of tides, the loving presence of a family pet, the sense of renewal that stems from tending a garden. The healing power of art has equally varied connotations.

Neither, however, springs immediately to mind when one thinks of hospitals, places usually associated with unforgiving terrain: white walls, labyrinthian corridors, sharp lights and noises and feelings of powerlessness, fear and anxiety. While research has long established clear ties between nurturing

environments and healthy people, it's only recently these findings have found powerful and vibrant expression in the architecture and design of hospitals.

At the forefront of this "quantum leap" in thinking are two Australian projects, Queensland Children's Hospital in Brisbane and the new Melbourne Royal Children's Hospital, both of which integrate elements of nature and art to produce spaces that embrace holistic ideas of what it is to heal. Far from simply a painting on a wall or a pot plant in a courtyard, art and nature are primary sources of inspiration in both projects, woven into every element and

stage of design — from the conception of floor plans and the shapes and orientation of rooms, to the integration of sustainability principles and the colours used in the buildings.

They are hospitals that incorporate healing gardens, interactive art, performance spaces and reference the natural environments that surround them in ingenious ways. Their design principles are born out of wide research in the disciplines of medicine and architecture, and in the needs and experiences of local stakeholders and the hospitals' users — from children and their families to doctors, nurses and managers.

For Kristen Whittle, director of Bates Smart, the architects (with Billard Leese) behind the design of Melbourne's new Royal Children's Hospital, both projects "set new benchmarks for hospitals around the world". The first stage of the new Royal Children's Hospital will be completed in 2011, opening the doors on a structure that draws as much from the pioneering work of American academic Roger Ulrich and biologist E. O. Wilson as Scandinavian artist Olafur Eliasson; in their respective disciplines, each examines the way nature and the elements affect our moods and

sense of spiritual well-being.

Touted as a "park within a hospital, a hospital in a park", the building seeks to camouflage itself in design elements that mimic its Royal Park surroundings. The facade on the inpatient unit, for example, is crafted from concrete cladding engineered to take on the colours of eucalypt bark, while a canopy on the hospital's west face crafted from blades of glass mimics the formation of feathers or petals, changing its colour depending on the time of day and intensity of light it reflects.

Whittle says it was important for the hospital to embrace "childlike nuances", to demark itself as a building for children to engage with. "The hospital treats toddlers through to young adults, and while young children look for a sense of familiarity, home and warmth [in

spaces], older kids look for fantasy and escapism. The design needed to accommodate both."

Its floor plan, based on the idea of a village, draws from Reggio Emilia education philosophy: the building has a central "street", with facilities situated along it like an avenue. The central atrium has a three-storey sculpture, hanging installation work and alcoves that form gateways into other art works. Many works have interactive visual and audible elements, ideal for keeping young minds engaged. A seven-metre aquarium will link the emergency centre to the street, while the building is skirted by a series of gardens, each of which is splashed with light at different times of the day.

The design for Queensland Children's Hospital, for which Melbourne architect Corbett

Lyon recently won the 2010 Arts and Health Australia Award for Excellence in Architecture, Design and Healthcare Environment, draws on many similar principles. Conceived in collaboration with Brisbane's Conrad Gargett, it's based on the idea of a tree; from the building's "trunk", multiple branches radiate, each leading to enormous picture windows with views across Brisbane. Corbett, whose practice has been designing hospitals for 15 years, says basing a building on a "narrative" helps people identify with its spaces and feel less intimidated and alienated, emotions hospitals often provoke.

"When we did our research, the first thing people said is that they didn't want it to look like a hospital. So we asked them to draw pictures of what it should look like." Patient journeys, tra-

cing "from the moment you get out of your car in the basement car park to go to your appointment in the clinic of level three, what's the simplest clearest way to get there?" were mapped. The design of a low-rise hospital with clear, pathways emerged.

The exterior of the hospital wears a skin of aluminium blades, each painted to mirror the foliage and blooms of its natural setting: jacaranda and bougainvillea.

The hospital's interior draws on a colour wheel, the spectrum of which derives from images of Queensland's flora and fauna. Indigenous plants also feature in the development's five rooftop gardens; places for children to do rehabilitation exercises and retreat with family. Along with prominent sculptural commissions, the hospital will also display small-scale works posi-



An image of Melbourne's new Royal Children's Hospital.

tioned to engage children at their eye-level.

Both projects are being watched from overseas; Corbett recently addressed a contingent of American and English doctors, while Whittle has presented conference papers and essays at international conferences and in publications.

"Australia is rebuilding its infrastructure in health and so the latest and greatest ideas are starting to manifest themselves here," Whittle says. "Governments want to lower the waiting lists in their hospitals and one of the best ways to do that is to create a better environment so people get better faster. [There's also] a realisation that good design and good environments don't necessarily cost more. And we measure value for money in more insightful ways; not simply how much is the hospital going to cost, but how much will it cost to run, how many people will it treat, and so on."

Whittle and Lyon acknowledge the "great privilege" of designing a hospital for children, as well as for the doctors and nurses who devote their lives to caring for society's most precious members. "A hospital is not like designing a bridge or freeway, you're designing a building for people, in this case to heal children. And the Royal Children's Hospital is a crucial part of Melbourne's social fabric; you become very connected to a project like this," Whittle says.



Corbett Lyon and the Queensland Children's Hospital design.