



practice—Sibling Architecture
project—Monash University
Biomedical Discovery Institute
location—Clayton, Australia
text—Fiona Gruber
photography—Laure Joilet

Voyage of discovery

The latest project from Sibling has changed the face of the institutional interior forever. Fiona Gruber investigates Monash University's new Biomedical Discovery Institute to discover for herself just what's so different.



Positioned on the southern side of the plan. Air is drawn inside at the building's sides, through the openings, through the ceiling, and through the floor into the space.

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There's a joke that goes: When you're talking to a scientist, how do you tell if they're an extrovert? Answer: they stare at your shoes, not their own.

It's not that Monash University's new Biomedical Discovery Institute was visually introverted but it didn't exactly flash a wide smile or even make proper eye contact.

It's quite a standard building and the clients were concerned that you couldn't tell what this building was for at all, Sibling Architecture director Jane Caught says. Sibling, a Melbourne-based practice, created in 2012 by eight friends, won the tender to refurbish the building's expansive ground floor foyer.

The research hub was created to establish cross-disciplinary and industry connections and called for an interactive space that showcased the ground-breaking and world-class research taking place on the university's Clayton campus. But it's not easy conveying a world that develops in petri dishes and clinical trials. The answer: Turn the vestibule into a scaled-up light-filled high-tech wunderkammer.

The idea was to transport the user of the space out of the everyday, through a range of different scales into a microscopic world, Caught says.

The colour and textures of the outcome reflect the working methodology and artifacts of the researchers: brightly coloured microscopic photography, crystallography and chemical reactions.

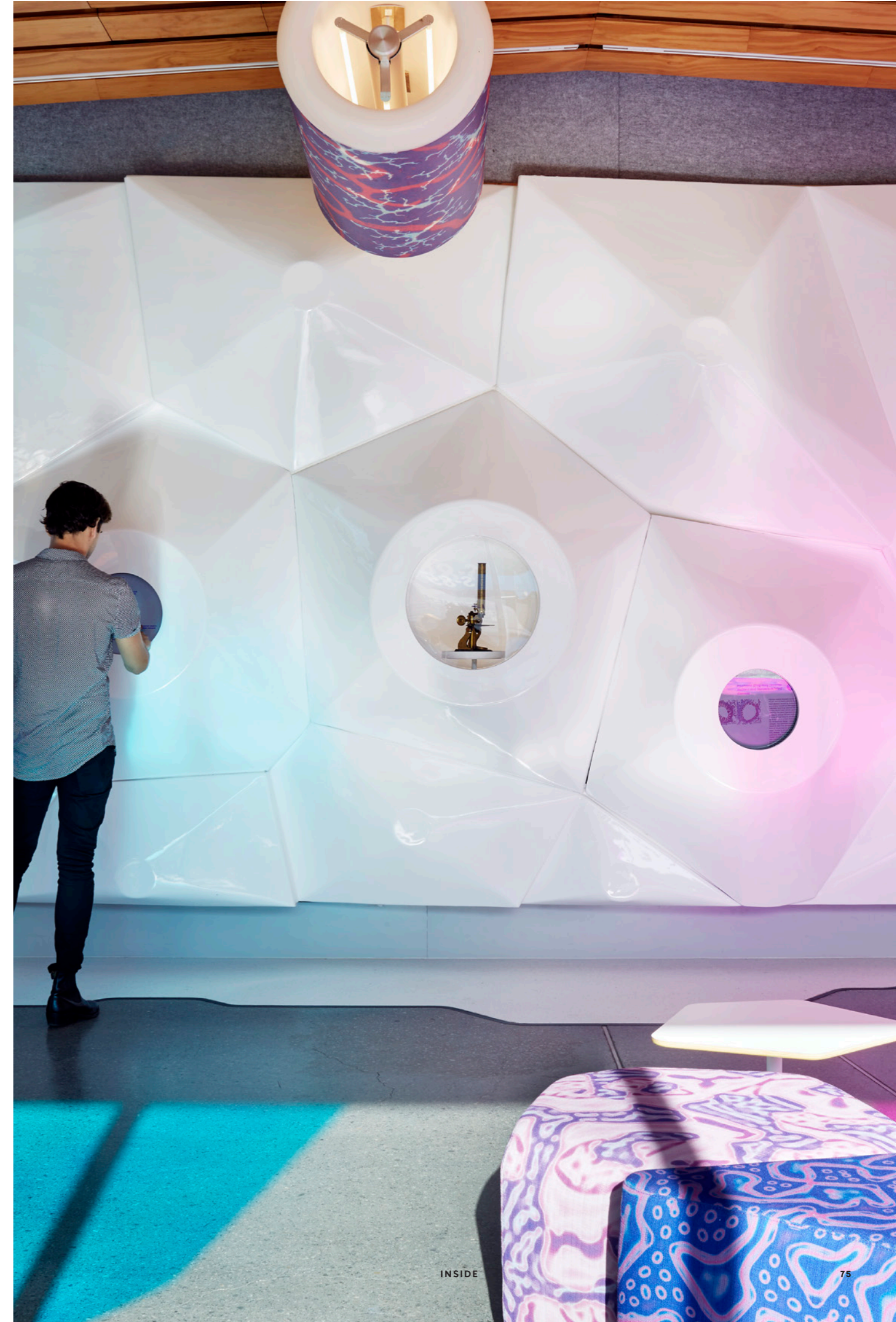
Sibling has made a name for itself by exploring the way digital space influences physical space and Caught and co-director Amelia Borg have employed holograms and interactive software to tell the Institute's story and history. They've also created a vibrant and airy public space using moveable screens and seating configurations with fabric designs designed on-site that are based on computer algorithms. It's information-rich and accessible, but, explains Caught, they were carefully not to dumb down.

We were trying a lot of different technologies and we also had to work out how to convey what happened here without being too basic for the scientists, Caught says.

The first thing that strikes the visitor as they enter through the sliding glass doors is a white feature wall based on Voronoi geometry: the 15-metre-wide, 2.7-metre-high frieze is a three-dimensional asymmetrical tessellation of cellular shapes made from fibreglass, each of them unique and many of them containing giant portholes or oculi: each is interactive and captures an



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aspect of BDIs research. This parametric modelling uses Grasshopper computer software.

Progressing through the 491 metre square space, an interactive wall gives a time line of research from Monashs foundation in the 1950s to the official opening of the BDI by the Prime Minister Malcolm Turnbull in November last year. And it is a very impressive series of firsts, from pioneering in vitro fertilisation in the 1970s and developing the worlds first successful anti flu drug in the 1980s to emerging advances in leukaemia treatment and novel therapeutics for Alzheimers disease.

Sibling worked closely with Monash Communication and Design students to explore the user experience, to integrate the touch screens, 3D printed models, holograms and the interactive timeline which allows for content to be uploaded as research findings come on line.

As well as the wall fixed displays, stand alone plinth oculi and vitrines are dotted about, continuing the story and the world of wonder feel. One contains the brass cast of a kidney another a 3D printed protein molecule.

Another important element is the spill of light it streams into the space and the use of dichroic film patches on the floor to ceiling glass creates colourful lozenge shaped shadows, another mess with the scale moment as its a bit like socialising with blobs of protein.

Colour pops at you, from the drum shaped ceiling mounted light fittings to the modular mobile seating,

the moveable rippled screens and the cloth clad wall coverings. The upholstery fabric, in shades of green, purple and pink, relies on computer graphics mimicking natural patterning.

Its based on an algorithm which describe how chemicals react to each other , Caught says. It was discovered in the 1950s but could only be visualised in the 1990s when computer graphics caught up.

The result is a public space that also feels domestic. Researchers mill about, holding impromptu meetings, flipping open their laptops at stand up desks, drinking coffee. Its humming.

The BDI project was initially a smaller project but Caught says the budget grew five times we were proposing lots of things and in the end they decided they wanted to do everything. It sits alongside other projects Sibling has undertaken for Monash University the Overseas Student Lounge at its Caulfield campus, and, at Monashs Peninsula campus in Frankston, the School of Midwifery and the Students Union Caf . Each has added to the store of practical knowledge of the expectations and realities of university life.

Most Monash projects are used by such high volumes of students that all our ideas are about users having agency and being able to shape the space in ways that suit them, Caught says. The digital folding into the physical is really important.



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