

Designing for the Margins: How Inclusive Innovation Transforms Healthcare for Everyone

Co-authored by Camelia Soh and Germaine Tan; Edited by Shermaine Ong; Content Layout by Germaine Tan, 27 February 2025.



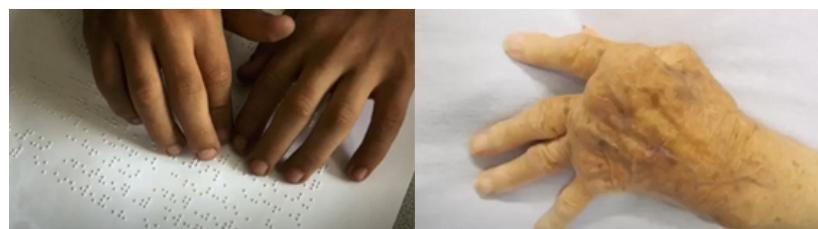
Photo of CHI's 19th Masterclass with Eugene Chin, Tamsin Greulich-Smith and Dawn Lim from Design Singapore, Michela Magas from MTF Labs, Dr Patricia Moore from MooreDesign Associates, and Prof Wong Hon Tym from CHI.

This article is inspired from the CHI's 19th Masterclass, "Designing the Future of Healthcare: Innovation at the Intersection of Human-Centered Design and Technology", held in February 2025.

Singapore stands at the forefront of global healthcare innovation, yet the challenges of an ageing population call for fresh perspectives. This panel brought together two world-renowned visionaries: Dr Patricia Moore, President of MooreDesign Associates, a pioneer in inclusive design; and Michela Magas, Founder and President of MTF Labs, a leader in creative innovation ecosystems. This masterclass highlighted the power of inclusive design in transforming healthcare equity and accessibility.

From "Those People" to Universal Solutions

Dr Moore revolutionised design thinking through her unwavering commitment to "Those People" who were systematically excluded from traditional design processes. Throughout her career in the design industry, Dr Moore was repeatedly told that "Those People" - the visually impaired, those with physical limitations, and other marginalised groups - were "not a matter of design."



Photos from Dr Moore's presentation on "Those People".

For Dr Moore, this dismissal made no sense. She recognised that it wasn't "Those People" who failed, but rather the environments and products that filled their homes that failed to meet their capacity. This revelation sparked a radical experiment that would transform her understanding of inclusive design forever.

The Radical Experiment: Living as an 85-Year-Old at 26



Photo of Dr Moore dressed as an 85-year-old and her book "Disguised".

Determined to truly understand the elderly experience, Dr Moore embarked on an extraordinary four-year journey, transforming herself into an 85-year-old woman at just 26 years old. This wasn't merely observational research – it was complete immersion into a lived experience that society often overlooks.

“Unless you're lucky enough to get into their home and really observe, we don't know for sure how well they're doing. Design was challenged to get true information about what was needed.” - Patricia Moore

At the end of her four years' experience, she emerged with '**universality**': through inclusive design, the world's needs would be met with equity, with focus on one's lifestyle and quality of life.

Inclusive design takes user-centered design one step further in that it actively seeks out and considers the needs of 'extreme' users. It flips the pareto principle to focus on the 20% (or less), recognising

As a gerontologist, Dr Moore emphasised that age is merely a number. Across all walks of life, individuals consistently defy age-related expectations through their remarkable abilities and capacity. This same principle applies to all "Those People" who have been marginalised by traditional design thinking – their perceived limitations often mask extraordinary potential that emerges when environments and systems are designed to support rather than constrain them.

From Medical Model to Human-Centred Design

“So we must change the medical model, something that gives us durable medical equipment in horrible environments of products and places so that people everywhere can be viewed first and foremost as a consumer. User centred design, patient centred design is about celebrating what the individuals can do, want to do, wish to do.”

In one compelling experiment, her team tested the use of neurofeedback sensors to play music by linking them to a musical scale. While a typical person requires about two hours to learn this brain-computer interface, a blind singer named Riikka could play music instantly and directly with her brain waves when fitted with neurofeedback sensors.



Photo of Riikka wearing the neurofeedback device from MTF Labs.

“In a certain world, people like Riikka were labelled as less able bodied. But in an era of brain computer interfaces, she was far more able than the rest of us. We were the ones who were less able bodied.” – Michela Magas



Explore full article on CHILD's Learning and Development System



Enjoy these benefits on CHILD:

- Access to healthcare innovation, improvement and productivity projects.
- Access to projects across all three healthcare clusters and community care sector.
- Nurses, Allied Health Professionals, Pharmacists and Social Workers can earn CPE points on CHILD through self-directed learning.