

NEWS

1 May 2025

Thrive co-hosts the "Stanford Forum on Sustainable and Healthy Buildings with a Focus on Indoor Air Quality"

Thrive is pleased to have co-hosted the "Stanford Forum on Sustainable and Healthy Buildings with a Focus on Indoor Air Quality" at Stanford University from 31 March to 1 April 2025. The Forum was led by Professor Milana Trounce of Stanford University Faculty of Medicine, and Distinguished Professor Lidia Morawska, Centre Director of Thrive at the Queensland University of Technology. Leaders from science, public health, industry, and government convened to explore how we can align indoor air quality (IAQ) and energy efficiency

in the built environment. Amid the escalating risks of pandemics and climate-related disasters such as wildfires, the need for buildings that promote human health and environmental

sustainability is more evident than ever. Scientific evidence highlights the crucial role of clean indoor air in bolstering resilience to such challenges and improving overall human well-being. This invitation-



only event brought together leading experts in building design, certification, air monitoring, science, and government to figure out how to make clean indoor air happen for all. We tackled tough questions around IAQ performance standards, implementation feasibility, cost, and design—and explored how we can align clean air and energy goals for the sake of not only human health but also the health of our planet. Whether through regulatory approaches or market transformation, we aim to move towards a future where healthy, resilient, and sustainable buildings become the norm.







Thrive Forum: Indoor Air Quality in Schools, 17 July 2025 at QUT



Registrations are now open for the upcoming Thrive Forum: Indoor Air Quality in Schools, to be held at the QUT Gardens Point Campus on 17 July 2025 from 9am to 3pm in the Owen J Wordsworth Room. A zoom link will be made available to registered participants to connect virtually. The agenda and more details about the Forum will come soon.

Click here to register for the forum

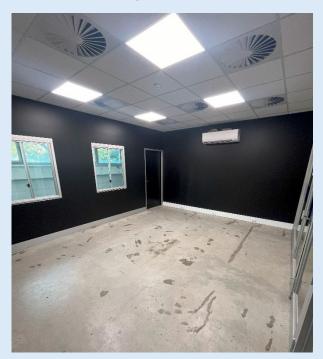
Charles Darwin University appoints Professor Lindy Burton

Professor Lindy Burton, Associate Director of Communication at Thrive, joined the Faculty of Arts and Society in her new role as Professor of Architecture at Charles Darwin University on 14 April 2025. Lindy's industry practice specialises in the education and health sectors. She was invited to teach at QUT as an industry expert and has held a continuing academic position there since 2008, teaching in a range of subjects including technical documentation, project management, studio and professional practice. Her current research is in the field of design for healthy buildings. Congratulations to Lindy! Read more here.



The University of Melbourne opens new Thrive laboratory

The fluid mechanics group at The University of Melbourne boasts extensive laboratory floor space with world-leading wind and water-tunnel facilities and state-of-the-art instrumentation for experimental measurement of fluid flow. In support of the ARC Thrive ITTC, the University of Melbourne has completed the construction of an IAQ test space, complete with HVAC simulator and imaging instrumentation for air flow measurement and humidity and temperature control. This new facility will be key to the Centre and to higher degree research students with an excellent foundation for high quality experimental research. Additionally, the fluid mechanics group owns and operates a wide array of imaging systems for particle image velocimetry and particle tracking and other anemometry systems such as hot-wires and laser doppler anemometry. The group will now be capable of state-of-the-art experiments relating airflow to IAQ, incorporating HVAC optimisation and sensor technology.





Introducing Thrive researchers at the recent PhD Research Philosophy meeting

Thrive researchers congregated at a recent PhD Research Philosophy meeting. The group has been getting together in a series of meetings to discuss how to successfully conduct and complete a PhD research program, have fun, and build a legacy. The first meeting was held on 17 February 2025 and was led by the Academics and Supervisors. The second meeting was held on 14 April 2025 and was led by the PhD students.

(Top image, back row: Mr Antoine Geray. Second row: Ms Savinda Heshani, Dr Hedy Wang, Ms Samitha Wijewantha, Ms Dilani Madhubhashini, Prof Lidia Morawska, Dr Ren Estaquito, Hongzhi Zhang, Dr Robert Groth, Dr Henry Oswin. Front row: Ms Kavindi Gunasinghe, Mr Punsara Dharaka, Ms Udita Gupta, Mr Bingnan Zhao. On the screen: Dr Xiangdong Li, Mr Salman Khan of The University of Melbourne)





2025 Clean Indoor Air for ALL Conference, 13–15 October 2025, Melbourne, Australia

We're excited to support the 2025 Clean Indoor Air for ALL Conference, organised by the Clean Air Society of Australia and New Zealand (CASANZ), taking place in Melbourne on 13–15 October 2025. This conference will bring together global experts to tackle the critical challenges of indoor air quality (IAQ).

IAQ is a fundamental determinant of human health, safety and well-being, yet the challenges we face in improving air quality are more complex than ever. This conference will focus on bridging the gap between public health and occupational



health, ensuring IAQ management strategies protect both the general population and workplace environments.

The World Health Organization hosts the Second WHO Global Conference on Air Pollution and Health

The Second WHO Global Conference on Air pollution and Health was held in Cartagena, Columbia from 25–27 March 2025. This conference focused on accelerating action for clean air, clean energy access, and

climate change mitigation. It leveraged insights from the COVID-19 pandemic, from experts who explored solutions to improve indoor environments, reduce health risks, and align air quality goals across sectors and regions. Distinguished Professor Lidia Morawska, Thrive Centre Director, presented two sessions at the conference. One presentation titled "Healthy indoor spaces: Improving indoor air quality to protect our health" examined pollutants, health impacts, and mitigation strategies in diverse settings. She presented a second session titled



"Bridging air pollution, health and climate: Tackling black carbon and ultrafine particles", where she gave an overview of the exposure and health effects of ultrafine particles. Black carbon and ultrafine particles present significant health and climate risks. This session reviewed the latest evidence on exposure and health effects, highlighted actionable mitigation strategies, and encouraged collaboration across sectors. Discussions focused on how integrated approaches can achieve measurable health benefits while driving progress in air quality and climate action.

Sign the Centre for Safe Air's open letter: Australia needs a National Clean Air Strategy



All Australians should be able to breathe clean, safe air. But right now the health impacts of air pollution are increasing while government responsibility for clean air remains fragmented. These are the key messages from the Centre for Safe Air's Open Letter to 2025 Federal Election Candidates calling for a National Clean Air Strategy. The open letter has been signed by 14 national peak bodies, research and advocacy organisations including THRIVE, the Heart Foundation, Asthma Australia, The Lung Foundation. The Burnet Institute. Doctors for the Environment, and the Climate and Health Alliance. Investing in cleaner air provides a large return on investment for all Australians by:

- Improving health outcomes related to many chronic illnesses such as asthma, chronic obstructive pulmonary disease, pulmonary fibrosis, heart disease, stroke, diabetes, dementia and cancer
- Improving productivity by reducing the spread of respiratory infections, airborne disease and epidemics such as COVID-19
- Supporting healthy child development and enabling us to stay healthier longer
- Reducing greenhouse gas emissions to secure long-term protection of Australia's health, economy and security from worsening climate change impacts.

To read the open letter and add your name please visit: https://safeair.org.au/open-letter/

International Union of Architects Young Architects Competition

World Architecture Day, created by the International Union of Architects (UIA) in 1985, is celebrated annually on the first Monday of October. This day coincides with the United Nations World Habitat Day, aligning the architectural community's efforts with global urban development goals. The UIA celebrates the theme "Empowering the Next Generation in Participatory Urban Design", highlighting the importance of empowering young architects to lead the profession into the future, while also acknowledging the vital role architects play in developing inclusive urban settings that foster sustainable environments. The UIA Council has announced the upcoming global UIA Young Architects Competition for architects under 35 to participate in proposing creative solutions that address the evolving needs of our urban environments. The competition focuses on the active role that young architects can play in sustainable, designing inclusive, and environmentally friendly cities. An international jury

will assess the entries and the winners will be announced during the Venice Biennale. The winning entries will be exhibited at Palazzo Zorzi from 8–15 May 2025. This exhibition will showcase the creative ideas of young architects, emphasising their impact on shaping the future of the profession and urban environments. Read more here.



Visting delegation at QUT from the National Sun Yat-sen University of Taiwan

Distinguished Professor Yuan-Chung (Oliver) Lin of the National Sun Yat-sen University, Taiwan, visited the QUT Thrive team on 11 April 2025 with two of his PhD students. Professor Lin is Coordinator of the Environmental Engineering Program. Distinguished Professor Lidia Morawska gave a tour of our facilities and explained our work in indoor air quality. It was agreed that we would look at possible collaboration in the future between Thrive and the National Sun Yat-sen University, Taiwan.



Team member spotlight

Ms Dilani Madhubhashini Hewa Singappulige, PhD candidate



I am originally from Sri Lanka, a beautiful island nation in South Asia known for its rich biodiversity and lush natural landscapes. I grew up in a small, picturesque village where I was constantly surrounded by nature. This close connection with the environment during my childhood inspired a deep interest in the natural world and encouraged me to study biology in school. That passion eventually led me to pursue a Bachelor of Science in Environmental Conservation and Management as my undergraduate degree at the University of Kelaniya, Sri Lanka, where I graduated with First-Class Honours in 2021.

After completing my degree, I gained valuable experience working in both academic and industry settings, contributing to various projects focused on environmental science and sustainability. These experiences deepened my understanding of real-world environmental challenges and reinforced my desire to contribute to meaningful change.

In 2024, I began my PhD at the ARC Training Centre for Advanced Building Systems against Airborne Infection Transmission (THRIVE) at Queensland University of Technology. My research focuses on exploring the impacts of outdoor air on indoor air quality, particularly in the context of climate change. Through this work, I aim to build a strong scientific foundation and identify innovative, evidence-based strategies to improve indoor air resilience and support the creation of healthier built environments. Currently, I am working on a school project to measure selected indoor pollutants in various schools located in the Brisbane Metropolitan area.

As part of the THRIVE team, I am working closely with others in the team, collaborating in their research, sharing ideas, and offering help. I strongly believe that sharing knowledge and helping each other not only strengthens us but also creates a more positive and productive research environment for everyone.

New publications



Morawska, L., Asbach, C. and Patel, H. Application of PM_{2.5} low-cost sensors for indoor air quality compliance monitoring. Aerosol Science & Technology, 2025.

Lekamge, S., Jayaratne, E.R., Fooks, C., Gammulle, H. and Morawska, L. Dualpurpose smoke alarms: Integrating low-cost PM_{2.5} sensors for combined fire detection and indoor air quality monitoring. Aerosol Science & Technology, 2025.

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