Thrive

Thrive is an ARC Training Centre for Advanced Building Systems Against Airborne Infection Transmission

N E W S

13 March 2025

Distinguished Professor Lidia Morawska receives the “Presidents Award” from the Australian Institute of Architects

Distinguished Professor and Australian Laureate Fellow Lidia Morawska (Director of Thrive) was awarded the 2024 Australian Institute of Architects Queensland President's Prize for her exceptional contributions to architecture, particularly in advancing the understanding of indoor air quality and its role in building design. The award ceremony was hosted by Michael Keniger of the Australian Institute of Architects. The event was attended by prominent government leaders, including Queensland Deputy Premier Jarrod Bleijie and Queensland Government Architect Leah Lang. Professor Morawska is globally recognised as a leading expert in atmospheric, aerosol, and exposure science, especially regarding indoor air quality and building infection transmission. Please join us in congratulating Lidia on her latest accolade.

Thrive hosts the Governor-General of the Commonwealth of Australia, Her Excellency the Honourable Ms Sam Mostyn AC

Thrive hosted Her Excellency the Honourable Ms Sam Mostyn AC on 24 February 2025 at Queensland University of Technology Gardens Point Campus. Her Excellency visited our respiratory laboratory, atmospheric simulation chamber, instrumentation laboratory and atmospheric mass spectrometry laboratory accompanied by Professor Lidia Morawska and Professor Zoran Ristovski. Her Excellency also talked to our post-doctoral fellows and PhD students about their research. The conversations were inspiring and we are grateful to be able to showcase the work we are doing to Her Excellency.

Thrive visits Aspley State School

On 16 February 2025, Dr. Enoch Adotey and Dr. Henry Oswin, along with our PhD students (Savinda Lekamge, Punsara Don, Dilani Singappulige), participated in Aspley State School's Family Fun Day event. The team collaborated with the "Safer Air Squad," led by teacher Mr. Cameron Haigh, to raise awareness about the importance of good indoor air quality in school environments. Activities at the event included demonstrating how an air filter cleans polluted indoor spaces, showcasing a paper craft of a 'clean air classroom', and using a CO_2 monitor to compare the air quality in two jars (one with human breath and the other with regular air). The Thrive team also conducted experiments using low-cost sensors to measure $PM_{2.5}$ and CO_2 concentrations. The team looks forward to finding further similar opportunities to raise awareness about the importance of air quality.

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.

Thrive/Stanford University Forum on "Sustainable and Healthy Buildings: Integrating Indoor Air Quality (IAQ) with Energy Efficiency", 31 March to 1 April 2025, Stanford University, California, USA

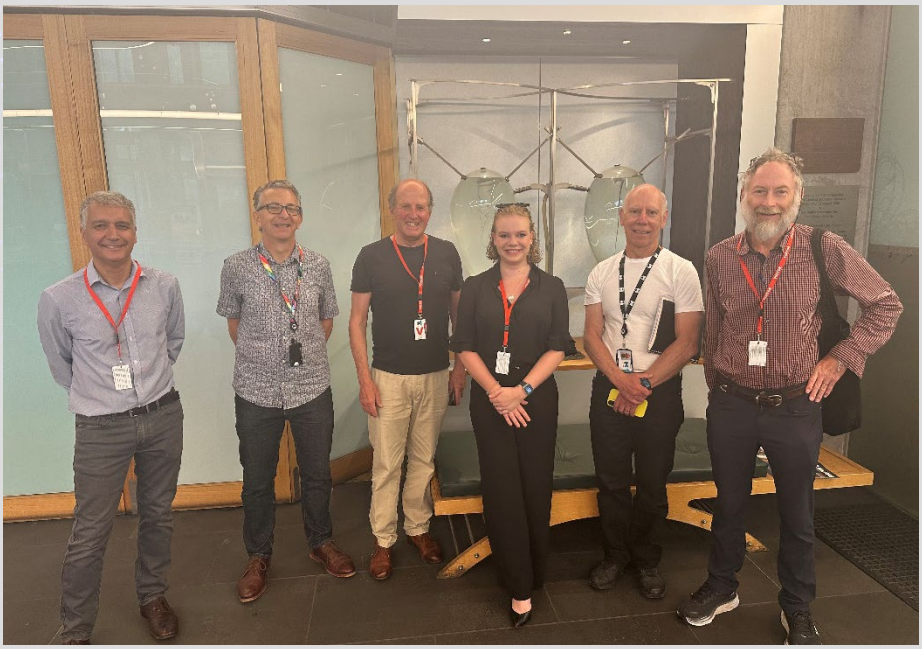
A Thrive/Stanford University Forum on "Sustainable and Healthy Buildings: Integrating Indoor Air Quality (IAQ) with Energy Efficiency", will be hosted at Stanford University, California, USA, on 31 March to 1 April 2025. This forum aims to bridge the gap between science, industry and regulators to explore what it might take to ensure healthy and sustainable indoor air environments, supported by scientific evidence, robust public health and economic imperatives, innovative technologies, and a collaborative regulatory framework.

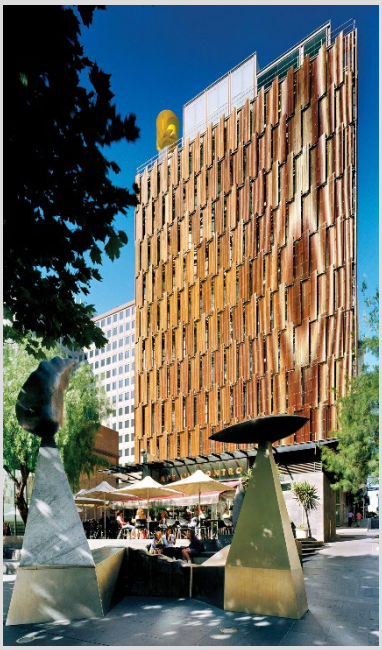
Discussion topics for the Forum include:

- What does industry think of these performance standards in general?
- How likely is it that buildings already meet the standards?
- If not, what needs to be done so they comply with the standards? (Better design, demand for this)?
- What will be the cost of the improvements (installation of sensors, ventilation improvements, etc.)?
- Would this require changes to design standards?
- Will the industry stand behind these performance standards (or performance standards in general)?
- How unified/divided is industry on this topic?

Thrive research team visits the Iconic Council House 2 Building at Melbourne

On 4 February 2025, Professor Richard Brown, Simon Witts (Director of VA Sciences and industry partner of Thrive) and Ms Justine Hupkes (PhD student) from Thrive visited the Melbourne City Council House 2 (CH2) Building. They were given a tour by Rob Adams (former City Architect of Melbourne), Garry Ormston (Senior Project Advisor, CH2 Building), and Paul Di Nello (Senior Project Architect, CH2 Building). The CH2 Building is designed to save energy, water and greenhouse gases, with advanced ventilation systems to reduce pollutants and airborne infection transmission. Ms Hupkes will be researching how effective ventilation systems in the building contribute to these benefits. Stay tuned for more updates!





Team member spotlight

Dr Stuart Grange, Thrive Postdoctoral Research Fellow

I grew up in the South Island of New Zealand surrounded by hills and the ocean. My childhood interests were based on the natural world with a particular emphasis on fish and seabirds and this resulted in my schooling focusing on biology. These interests motivated me to complete an undergraduate degree in zoology and geography. As my research career began to develop, my interests shifted to the interface of the human and natural world with a particular focus on how anthropogenic activities change the natural environment. Atmospheric systems struck me as one of the best examples of this interface and I was lucky enough to secure funding for an air quality research project based in my hometown where woodburning emissions are a problem. The success of this programme started my air quality career which has included working and studying in the UK and Switzerland and has now led me to Australia.

My time in the UK (where I completed my PhD) and Switzerland proved to be professionally productive and my interest in exploring the countryside, mountains, and the coast grew into a rather serious passion. I am a very keen runner and cyclist, and I have used these sports to act as a vehicle for exploring my surroundings and this is my primary hobby. Between my relocation from Switzerland to Brisbane, I spent a couple of months in the very north of New Zealand where I enjoyed the southern hemisphere summer. This photo was taken at the end of last year on the Tutukākā coast where I was running up and down the beaches.

I am employed as a postdoctoral researcher in the Thrive unit. I am working on a handful of projects including the building engineering project, where we are testing if a current operational building can comply with the proposed indoor air quality standards, the evaluation of an ultrafine particle monitor, and the management of an air quality sensor network. It has been a pleasure to meet everyone in the laboratory and I look forward to working with everyone in the future.

New Publications

Landy, S.A., Jamriska, M., Menon, V.J., Lee, L., Magnin-Bougma, I., Subedi, D., Barr, J.J., Monty, J., Kevin, K., Gunatilaka, A., Majumdar, S.S., Delaire, M., Marks, G.B., Stewardson, A.J., Morawska, L., Edwards, B.A. and Subbarao, K. **Ultraviolet Radiation vs Air Filtration to Mitigate Virus Laden Aerosol in an Occupied Clinical Room**. *Journal of Hazardous Materials,* 487: 137211, 2025.

Aganovic, A., Buonanno, G., Cao, G., Delmaar, C., Kurnitski, J., Mikszewski, A., Morawska, L., Vermeulen, L.C. and Wargocki, P. **Comparative Assessment of Airborne Infection Risk Tools in Enclosed Spaces: Implications for Disease Control**. *Infectious Disease Modelling,* 10(1): 338-352, 2025.

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