

# Compounds Australia

*Connecting Australia's chemistry researchers with the global bioscience research community.*

Compounds Australia provides access to critical infrastructure and expertise to ensure flexible, efficient, reproducible and cost effective compound management, supporting biological characterisation of compounds throughout the drug discovery pipeline.

## Our role

Established in 2008, Compounds Australia remains Australia's only integrated compound management facility. This highly specialised facility enables health and medical researchers worldwide to outsource compound and natural product management and logistics. This drives drug discovery and translational research efforts, through:

- sample lodgement and storage
- specialised formatting into assay-ready microplates
- access to unique robotic and liquid handling platforms
- a sample quality control program
- large-scale data handling
- programming and customisation of proprietary software
- data tracking at all points of processing.

## Open access libraries

Compounds Australia Structure Portal (CASPeR) was launched in early 2016 and enables researchers to browse or search the 'Open' Compound Collections via a web portal. This provides researchers with access to up-to-date information such as individual chemical properties.

Find out more at [compoundsaustralia.com/casper](http://compoundsaustralia.com/casper)

*'Compounds Australia is the only facility of its kind in Australia that could manage chemical libraries required for high throughput screening.'*

Former Universities Australia Chair, and Vice-Chancellor and President of University of Western Sydney, Professor Barney Glover, National Press Club, March 2016 – quoting CTx CEO, Mr Warwick Tong.



## Our services

Compounds are curated, either in microtubes or microplates, under industry-standard storage conditions to maintain their integrity for an extended shelf life.

Our equipment includes:

- five TTP Labtech comPOUND® stores with total capacity to hold 600,000 microtubes
- two Hamilton ASM Platestores with total capacity to hold 4,200 microplates
- multiple liquid handling platforms able to provide nanolitre (Labcyte Echo® 550) and microlitre (Agilent VPrep/Bravo) quantities of samples in multiple assay-ready formats
- four dedicated robotic platforms with integration to centrifuge, sealer, de-sealer and barcode tracking.

## Processing workflows:

- Microtube solubilisation and transfer into microplates.
- Microplate replication in 96, 384 and 1536 plate formats.
- Plate to plate cherry-picking in single- and multi-volume formats.
- Generate dose response curves via source and intermediate concentrations and designing custom plate layouts specific to customer needs.
- Access to specialised software that allows combination screening formats to compare a drug or other compound rapidly at a specific dose to look for synergistic or antagonistic effects.
- Data tracking at all points of processing.

## About GRIDD

Compounds Australia is part of the Griffith Institute for Drug Discovery (GRIDD). GRIDD tackles devastating diseases using the unique Compounds Australia and NatureBank resources, and an extensive global network of partners. We thank our supporters including AEGIUM, Cancer Therapeutics CRC, the Clem Jones Foundation, GHIT-Japan, Medicines for Malaria Venture (MMV), Parkinson's Queensland, Perry Cross Spinal Research Foundation, and the Queensland and Australian Government. We are proud to foster the next generation of drug discovery scientists.

## Compounds Australia members

Australian National University  
Cancer Therapeutics CRC  
Children's Cancer Institute  
Children's Medical Research Institute  
CSIRO  
Flinders University  
Griffith University  
James Cook University  
Macquarie University  
MecRx  
Medicines for Malaria Venture  
Monash University  
Parma University  
Peter MacCallum Cancer Centre  
QIMR Berghofer Medical Research Institute  
Queensland University of Technology

Regen BioPharma  
RMIT University  
St Vincent's Institute of Medical Research  
University of Adelaide  
University of Melbourne  
University of New England  
University of Queensland  
University of South Australia  
University of Sydney  
University of Wollongong  
University of Tasmania  
University of Western Australia  
Walter and Eliza Hall Institute of Medical Research

## Contact us

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