

VICTOR CHANG
CARDIAC
RESEARCH
INSTITUTE
**INNOVATION
CENTRE**

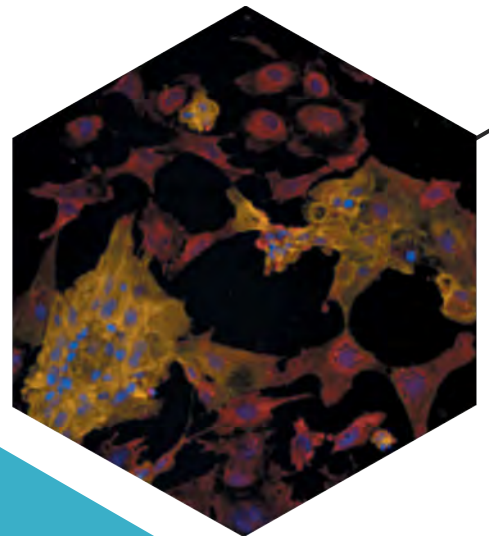


Stem Cell Production Facility



Stem Cell Production Facility

The Stem Cell Production Facility utilises the most advanced robotic technologies for the generation and maintenance of induced pluripotent stem cells (iPSC) that have been reprogrammed from human skin or blood cells. These cells can then be differentiated into any cell type in the body allowing researchers to identify new therapies for individual patients.



Support Provided

- Experienced support personnel
- Customised hands-on training in human iPS cell culture
- Derivation and characterisation of iPS cell lines from blood or skin
- Differentiation into various cell types
- Fee for service
- Cryogenic storage

Stem Cell Production

- Dedicated human iPS cell Facility
- Multiple Class II Biosafety Cabinets with integrated microscopes
- Two Micro STAR robots for large-scale automated iPS cell culture
- EVOS FL Fluorescent Cell Imaging System



Our Stem Cell Production Facility is a purpose-built PC2 facility equipped with the most advanced robotics technology to support the training and research of the scientific community and industry partners working in the field of stem cell and regenerative medicine. The automated robotics platforms facilitate the reproducibility and large-scale production of stem cells from hundreds of patients, allowing researchers and clinicians to identify new therapies using personalised medicine.

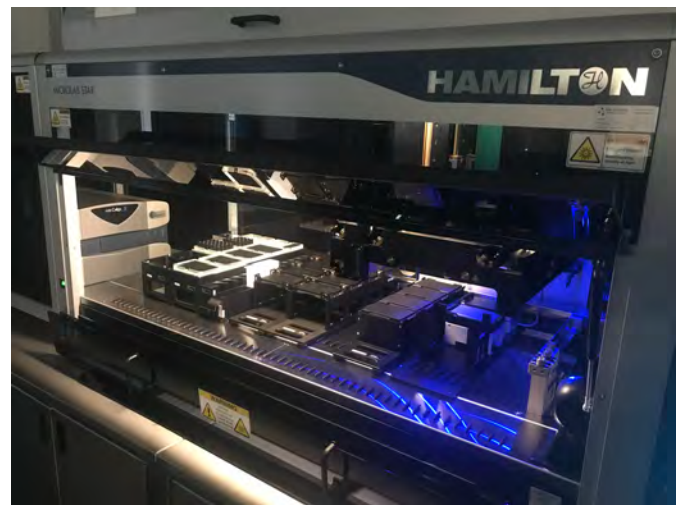
Funded by the NSW Government, this high-tech hub includes stem cell production to better help scientists in their search for the fundamental reason why some people are more susceptible to certain diseases and not others, and why some patients respond well to medication and others do not.

Microlab STAR Robot 1 (Hamilton)

A custom designed STAR Liquid Handling System integrated with Liconic incubators programmed for maintenance of iPSC cultures and their differentiation to cardiac myocytes.

Configured for long term maintenance and differentiation of multiple iPS cell lines

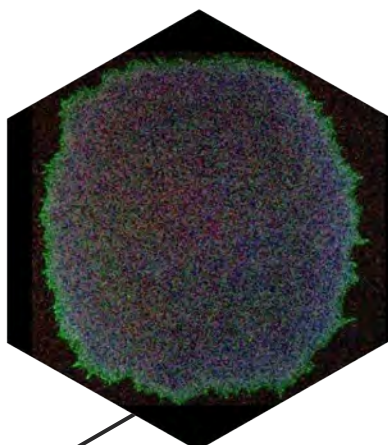
- Controlled environment to maintain the highest quality of cells
- CO-RE technology delivers enhanced precision, accuracy and reproducibility during continuous workflow
- Integrated Celigo fluorescent plate imaging system provides rapid live cell imaging during maintenance of iPSC and differentiated cell types



Microlab STAR Robot 2 (Hamilton)

Configured for large scale iPSC cell work with capability for performing viral and other high-risk activities

- Fully enclosed in a Biological Safety Cabinet
- CO-RE technology delivers enhanced precision, accuracy and reproducibility during continuous workflow
- Up to 96-well format
- Setup of high-throughput drug screening
- Attached Liconic CO2 incubator with a capacity to hold up to 34 plates



The power of discovery

The Victor Chang Cardiac Research Institute Innovation Centre is heralding a medical research revolution.

Proudly supported by the NSW Government, the Innovation Centre gives researchers access to state-of-the-art equipment and cutting-edge technologies, including two MRI scanners, a series of mass spectrometers, micro-CT, iPSC automated robotics and a cryo-electron microscope.

The Victor Chang Cardiac Research Institute Innovation Centre is pushing the boundaries of knowledge by facilitating a new era of collaboration between researchers across the state and the Asia Pacific, transforming the landscape of cardiovascular research.



Enquire about the Stem Cell Production Facility

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