



Commercializing
Living Therapies

CCRM Australia

CCRM Australia is an Australian not-for-profit organisation supporting the development of foundational technologies to accelerate the commercialisation of regenerative medicine products and therapies.

CCRM Australia's focus is to bridge the commercialisation gap through a network of scientists, entrepreneurs, academic institutions and industry partners and address bottlenecks in the field.

CCRM Australia is modelled on the highly successful Centre for Commercialization of Regenerative Medicine (CCRM) based in Canada, a leader in developing and commercialising regenerative medicine-based technologies and cell and gene therapies. Drawing from their expertise, industry and venture capital networks, CCRM Australia takes on a leading role in supporting Australia's quickly developing regenerative medicine sector.

Canada's Centre for Commercialization of Regenerative Medicine (CCRM)

Since its inception in 2011, CCRM has become globally recognised as a translation centre and has become a leading global commercial hub for regenerative medicine and cell and gene therapy. In partnership with top research institutions in Canada and abroad, and with a consortium of global industry leaders, CCRM has established a track record of developing and commercialising innovative technologies that tackle significant bottlenecks in the industry. Examples of this include:

- evaluation of novel biomaterials to enable cell product shipping,
- process optimisation on a cell therapy resulting in a 60% reduction in cost of goods,
- advancement of two novel drug screening platforms aimed at the direct measurement of contraction forces by contractile cells,
- co-development of image analysis software to enable analysis in a novel drug screening platform,
- development of novel cryopreservation approaches for specialised cells, and
- development of scalable expansion protocols for pluripotent stem cells.

CCRM has developed and implemented an efficient model for technology transfer that includes:

- in-licensing of technologies,
- value adding development either alone or in partnership with companies or academics,

- out-licensing of technologies/ processes to existing companies, and
- the bundling of technologies to create spin-out companies.

CCRM is keen to expand and develop an international network with an Australian hub modelled on the CCRM operational model. This hub is being developed with the support of CCRM in Canada, along with other emerging hubs in Europe, Israel and Japan.

The benefits of the CCRM model to Australia include:

- immediate access to a demonstrated commercialisation model and sector specific expertise developed by CCRM to be utilised for the benefit of local regenerative medicine discoveries
- Regenerative medicine product development, licensing and regulatory expertise
- Access to a consortium of world-leading regenerative medicine companies providing business skills and leadership, funds for product development, and receptor capacity for technologies and products
- Strong links to industry trends and needs through the industry consortium
- Participation and leadership in a global network of regenerative medicine hubs being established in Europe, Israel and Japan.

CCRM Australia helps 'bridge the commercialisation gap' and provide immediate access to an international consortium, through CCRM in Canada, that includes the major companies working in regenerative medicine.

CCRM Australia adopts a national approach to the commercialisation of Australian regenerative medicine and related technologies.

CCRM Australia: Quick Facts

- Australia's leading regenerative medicine researchers and industry have come together in a coordinated, collaborative fashion to support the creation of CCRM Australia.
- CCRM Australia is a not for profit organisation established to address bottlenecks in the translation and commercialisation of regenerative medicine discoveries in Australia.
- CCRM Australia is modelled on the highly successful CCRM in Canada and is legally separate to CCRM.
- As a member of the Global CCRM network, CCRM Australia is a partner to a leading edge industry consortium.



Case Study: ExCellThera

ExCellThera is one example of how the CCRM model creates additional value by bundling together complementary technologies to accelerate young companies into the clinical trial pipeline.

ExCellThera's technologies for hematopoietic stem cell (HSC) expansion utilize a novel fed-batch bioprocess (Dr. Peter Zandstra, University of Toronto) and a novel small molecule drug (Dr. Guy Sauvageau, Universite de Montreal). ExCellThera's technologies are being applied to develop expanded cord blood units for treating patients with blood cancers that require allogeneic (non-self) transplants of HSC following chemotherapy/radiation. The first indication to be pursued will be acute myeloid leukemia, which today accounts for ~35% of allogeneic HSC transplants. ExCellThera is also in discussions around licensing its core technologies to commercial leaders in the gene therapy space. Gene therapy indications are to include conditions such as beta thalassemia.

After conducting due diligence on these technologies, CCRM advanced company creation by supporting patent protection, market diligence, business planning and project management. Also, CCRM integrated the technologies in-house, optimised and scaled HSC expansion for clinical trials, and worked with CCRM's network to develop clinical manufacturing standard operating procedures (SOPs).

CCRM supported the preparation of the Clinical Trial Application with Canada's regulatory body, and provided hands-on technology transfer support as the process was transferred for Good Manufacturing Practices (GMP) cell manufacturing. CCRM is currently working with an industry partner on a commercial-scale manufacturing solution for the company. With support from CCRM and grants secured by Drs Zandstra and Sauvageau, the Phase I/II clinical trial will be completed without the need for external investment.



CCRM Australia founding partners



This venture has received funding through the MTPConnect Project Fund Program – a dollar-for-dollar matched program investing in big, bold ideas to improve the productivity, competitiveness and innovative capacity of Australia's medical technology, biotechnology and pharmaceutical sector. MTPConnect is supported by the Australian Government Industry Growth Centres Initiative – learn more at mtpconnect.org.au

Vision

- ENABLE unique translational platforms that address the key bottlenecks in regenerative medicine commercialisation
- INTEGRATE Australia's strength in stem cell and biomaterials sciences with dynamic business leadership
- ENGAGE industry partners, linking to a global nexus of regenerative medicine commercialisation
- INTERNATIONALISE Australian regenerative medicine activities to leading regenerative medicine powerhouses.



Being part of CCRM Australia offers:

- **Access to** world-class expertise in the development and commercialisation of regenerative medicine technologies from CCRM Canada, including specialist technical and financial support.
- **Promoting** specific capabilities and opportunities in Australia's state of the art discoveries, facilities and expertise to a growing international regenerative medicine industry partner network to facilitate international investment attraction and opportunities for trade partnerships.
- **Supporting and validating** locally developed IP through technology evaluation workshops
- **Increasing deal flow** through liberating funding and resources arising from strategic alliances with local and international investors, including CCRM.

CCRM Australia's commercially focused solutions enable businesses and research partners to optimise their international objectives by providing customised country, market and industry-specific support, including:

- **Executive leadership capabilities** – building executive skills, knowledge and capability to identify, manage and grow scientific and business opportunities.
- **Market awareness and opportunity assessment** – supporting informed decisions by building awareness into key markets, sectors, trends and operating environments.
- **Commercialisation knowledge** – to develop individual and organisational capabilities.
- **Sustainable partnerships** – enhancing skills, knowledge and capabilities to forge lasting business partnerships, partner-profiling, negotiations and in-market support.
- **Stakeholder engagement** – providing a leading platform to engage and shape the discussion on contemporary developments, through events, thought leadership and business facilitation.

To become more involved in CCRM Australia or for further information please contact:

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