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NO PLACE LIKE HOME FOR A WORLD-LEADING BIOTECH

A conversation with **PROFESSOR ANDREW CUTHBERTSON AO**, Chief Scientific Officer & Global R&D Director, CSL Limited

For seven years, Melbourne has been rated the world's most liveable city. It has vibrant community spaces and great beaches, and is famous for its arts and sports scenes. It also offers world-class healthcare and education. The state of Victoria leads Australia in health and medical research, engineering, digital technology, cyber security and gaming, agriculture and food production. Here, Andrew Cuthbertson outlines why CSL, a world-leading biotech firm and Australia's sixth largest company, is based in Melbourne.

CSL began in Victoria in 1916. How would you describe the company today?
CSL is a leading global biotechnology company with a portfolio of life-saving medicines for patients with rare and serious diseases, including haemophilia and immune deficiencies, as well as vaccines to prevent influenza.

CSL has two businesses, CSL Behring and Seqirus, which provide life-saving products to patients in more than 60 countries, employ more than 20,000 people and have major production facilities in the United States, Germany, Switzerland, the United Kingdom, China and Australia. Listed on the Australian Securities Exchange, CSL is in the top ten by market capitalization and was valued at just over AUD$75 billion in March 2018. The company is also Australia's largest private sector investor in medical R&D.

For our heritage and future, Victoria is important. We have two significant manufacturing sites in the state and our global R&D is based in Melbourne. About 90% of the company's revenues are derived from CSL Behring, our biotherapeutics business. Our therapies are indicated for treatment of bleeding disorders, immunodeficiencies, hereditary angioedema, neurological disorders and inherited respiratory disease. CSL Behring's Victorian plasma manufacturing facility processes plasma donations collected by the Australian Red Cross Blood Service to produce life-saving therapies. It also processes plasma for New Zealand, Taiwan, Singapore, Hong Kong and Malaysia and manufactures products for export using commercially collected plasma.

Seqirus, the world's second-largest influenza vaccine provider, has its Australian manufacturing facility on the same site as CSL's Parkville headquarters. It supplies seasonal influenza vaccines and products such as antivenoms. Rounding out this presence, CSL's Global Hub for Research and Translational Medicine is based at the University of Melbourne's Molecular Science and Biotechnology Institute 'Bio21' in the city's Parkville biomedical precinct.

How does Melbourne's biotech ecosystem support CSL's mission to develop innovative new therapies?
Innovation depends on exchange between people, and in the biotechnology sector, real ecosystems are created by close proximity of industry, research institutes, hospitals, and universities.

The biotechnology cluster around Parkville, comprising the University of Melbourne, the Walter and Eliza Hall Insititute for Medical Research, the Doherty Institute for Infectious Disease, The Murdoch Children's Research Institute, the Victorian Comprehensive Cancer Centre, the Royal Melbourne Hospital, the Royal Women's Hospital, the Royal Children's Hospital and CSL, among others, is a globally significant research presence.

'WE ARE COMMITTED TO FOSTERING THE NEXT GENERATION OF RESEARCHERS.'

CSL maintains our Global Hub for Research and Translational Medicine in Victoria largely because of the Parkville cluster and the quality of intellectual property the ecosystem generates.

How do you build links between academia and business?
CSL has many long-term partnerships with universities and medical research institutes, and we envisage these partnerships will expand and multiply, helping to translate more science into medicines for people with rare and serious diseases. A leading example of a successful academia–industry partnership is CSL's collaboration with the University of Melbourne's Bio21 Molecular Science and Biotechnology Institute. This year, we will open a state-of-the-art facility to expand our capabilities at Bio21. World-class infrastructure is vital for collaboration, but we are also committed to fostering the next generation of researchers through programmes such as our CSL Centenary Fellowships, which provide substantial funding for Australian scientists.

What role does government play in fostering an innovative business environment?
The Victorian government has been an important contributor to several CSL job-creating capital investments. In 2017, with its support, CSL opened a new AUD$230 million manufacturing facility at our site in Broadmeadows to help meet global demand for albumin, a protein derived from human plasma used in critical care. In total, CSL has invested more than AUD$610 million in the site over the past five years. Further, in R&D, we expect to more than double the number of scientists based at Bio21 to more than 150 with the expansion of our infrastructure at the Institute. We have started recruiting and have been impressed with the skill of Australian researchers who have joined us so far.

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