

# Australia and China working together to develop biotechnology

By Dr Anna Lavelle

Dr Anna Lavelle is the CEO of AusBiotech, Australia's biotechnology industry organisation that represents more than 3,000 members.

Anna has previously worked as an executive with the Australian Red Cross Blood Service, as the CEO of a public health organisation, as an industry lobbyist and academic. She holds a PhD in genetics from the University of Melbourne.

As China's interest in the benefits of biotechnology grows, its activity and commitment increases, so too does its interaction with Australian biotechnology interests.

China is developing as a pivotal partner in the Asia Pacific region, and this is especially important from an Australian perspective as a regional neighbour.

Australia observes with great interest and notes developments and investment in China as it emerges in the world market as a key player. China's commitment has placed it as an important future partner, with biotechnology one of the six key planks of economic development the central government's five-year plan – and it will be interesting to watch this important development and work along-side China over the next 10 years.

Australia ranks sixth in the world and is the leading location for biotechnology companies in Asia-Pacific with almost 450 biotechnology companies and 600 medical technology companies. It is home to a booming biotech industry and a world-leader in medical breakthroughs, such as the Cochlear hearing implant and cervical cancer vaccine (Gardasil). These achievements have not only improved the quality of health of millions of people across the globe, but it demonstrates the ability of Australia to successfully commercialise its innovation.

Inter-country collaborations on clinical trials are cheaper in Australia than the US and Europe in phases I and Ib, but the Australian population is small and a valid strategy is to coordinate phase III and at times phase II trials in China where there is a large 'treatment naïve' population. Science and business infrastructure in China is improving at a rapid rate, and education and training, especially at university level, has significant commitment from the government. In addition, efforts to retain a highly-skilled workforce in support biotechnological development, is bolstered for example by a program to repatriate experts living overseas, known locally as 'sea turtles'.

AusBiotech has taken two business missions from Australia to China recently, each consisting of more than a dozen organisations. This has resulted in research and development collaborations, where companies are partnering in an array of areas,

including on product developments, plus the establishment of a firm base of contacts, project developments and Memorandums of Understanding (MoU).

AusBiotech signed an MoU with the Tianjin Municipal Government, Science and Technology Commission in 2009. As a development of this relationship a Letter of Intent was signed during AusBiotech's most recent business mission in June 2010, with the Joint Academy of Medicine and Biotechnology in Tianjin. The letter provides an understanding that China and Australia will co-operate to develop an investment meeting to be held in Tianjin in 2011.

The first encounter with the Tianjin partners occurred during a business mission organised by AusBiotech in 2008, which included 15 Australian companies, many of which have continued to develop their links. The developing relationships have gone from strength to strength.

This year, AusBiotech had signed a further MoU with Chinese interests, which are expected to lay the foundations for future partnering in the medical technology and biotechnology area.

The Beijing-based China Association for Medical Devices Industry (CAMDI) and AusBiotech signed an MOU at the closing ceremony of AusMedtech 2010, in Australia in June, when CAMDI's Executive Chairman, Dr Jiang Feng was a keynote special guest speaker.

The MOU recognises the key role that medical technology and biotechnology plays in economic and social development, and the benefits of a strategic partnership between China and Australia. It aims to promote cooperation in the area of medical devices, especially where it will assist industry development; and facilitate interaction between Australian and Chinese parties and officials, scientists and technologists working in the medical technology sector.

The AusBiotech-led and Austrade-backed business mission this year was accompanied by Nobel Prize-winning Australian, Dr Barry Marshall. The mission, consisting of 15 companies and supported by Austrade, visited World Expo in Shanghai and technology parks – Zhang Jiang Hightech Park and Suzhou Industrial Park, Bio Bay.