

Biotech: bilateral research and commercial opportunities

Australia and India have strong biotechnology industries and complementary strengths. AusBiotech explains the new joint research projects and mutual opportunities in the industry.



Dr Anna Lavelle,
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Biotechnology is a global industry that, besides the global financial downturn, has been in a rapid growth phase in recent years around the developed world – providing solutions to health problems, life-threatening pandemics, food shortages and, more recently, climate change. There is little doubt that supportive governments and sympathetic public policy, as well as partnering with like-minds around the globe, are key to the survival and success of biotechnology.

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The Australian biotechnology industry has worked diligently to become the sixth largest biotechnology industry globally, and an excellent country in which to conduct clinical trials. With India's track record of fast growth, the largest offering of FDA-approved manufacturing facilities outside the United States and strong government support with the 'National Biotechnology Strategy', there are significant prospects and opportunities for India and Australia to work together.

Networks for accessing opportunities

AusBiotech, Australia's biotechnology industry organisation that represents more than 3000 members, has led business missions to India over recent years with more than 30 companies and universities participating in a program of business seminars, site visits and networking events in Hyderabad and Bangalore.

AusBiotech is Chair and Secretariat for 'BioNet Asia Pac', a network of 10 countries, which was launched in 2007. Members include India, Japan, Malaysia, New Zealand, Taiwan, Singapore, South Korea, Thailand, United Arab Emirates and Australia. Corporate and institutional members of the related industry associations have access to a closed website, which details the biotechnology companies working in each country. The group works to centralise opportunities and strengths from the region into a connected network. >

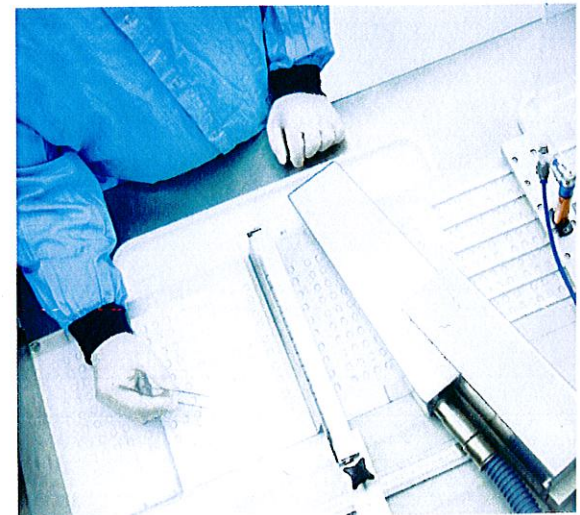
Bilateral research collaborations

There are a significant number of research collaborations between Australian and Indian universities, including programs at The University of Melbourne, Monash University, Queensland University of Technology, and the Queensland Institute of Medical Research.

Australia's Deakin University in Victoria has entered into a Memorandum of Understanding (MoU) with India's Biocon, for a joint multi-disciplinary research focused on biotechnology and biosciences. The territories covered in the MoU include:

- the establishment of the Deakin Research Institute in Bangalore
- Deakin, through its Metabolic Research Unit, will undertake research in the areas of metabolic diseases on behalf of the company.

Together, the Australian and Indian Governments have established the Australia India Strategic Research Fund (AISRF), which is providing \$65 million over eight years from 2006–07. This is Australia's largest bilateral research fund.



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Above: The Australia-India Strategic Research Fund recently funded eight biotechnology projects, all with bilateral research partners.

Right: Australia offers high quality science, capacity for international partnerships and a transparent and efficient regulatory regime.

Images: Medicines Australia

AusBiotech is Australia's biotechnology industry organisation, representing more than 3000 members across the human health, agricultural, medical device, bioinformatics, environmental and industrial sectors in biotechnology.

For more details, see www.ausbiotech.org

Indo-Australian Biotechnology Fund Project	Research partners	Funding
Approaches to develop an effective HCV vaccine	Women's and Children's Health Research Institute and Indian Institute of Science, Bangalore	\$300,000
Identification of diagnostic and prognostic biomarkers to improve management of diabetic ulcers	Queensland University of Technology and Manipal University	\$299,917
Molecular recognition between alkane hydroxylase and rubredoxin in alkane-degrading bacteria	Monash University and Tata Institute of Fundamental Research	\$297,838
Extraction and purification of sorghum seed protein for delayed delivery of bioactives	Curtin University of Technology and Institute of Chemical Technology	\$299,673
Solar bio-fuel and carbon sequestration with cyanobacteria: Role of genetic networks	Monash University and Indian Institute of Technology Mumbai	\$296,461
Rational development and evaluation of an effective vaccine for the prevention of Staphylococcal Mastitis in bovines using mouse mastitis as a model system	Curtin University of Technology and Bharat Biotech Foundation	\$300,000
Molecular approaches for sustaining crop productivity under abiotic stress conditions	The University of Melbourne and International Centre for Genetic Engineering and Biotechnology	\$300,000
Engineering novel disease resistance in wheat and rice by silencing disease susceptibility genes	CSIRO Plant Industry and Tamil Nadu Agricultural University	\$300,000



Above: There are significant prospects and opportunities for India and Australia to work together.

Image: Medicines Australia

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In May 2010, AISRF announced eight new projects within the Indo-Australian Biotechnology Fund, worth \$2.4 million from Australia to be matched by Indian government (table above).

Australia's attractive biotech sector

AusBiotech is drawing the attention of Indian investors to opportunities in Australia, as one of the lowest cost business locations in the industrialised world. Australia offers high quality science, capacity for international partnerships and a transparent and efficient regulatory regime.

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In the Asia Pacific region, strong foundations for development are crucial to the continued success of the biotech sector, with strong intellectual property (IP) protection, robust regulatory regimes and support for innovative start-up companies.

Austrade, which seeks to assist and advance trade and investment, worked with the Victorian Government to invite interested Australian companies to participate in Bangalore Bio (2-4 June 2010). The event was organised by the Government of Karnataka to promote the inherent strengths of the Indian biotech sector. Austrade's India Biotechnology Team assisted Australian biotechnology companies interested in exhibiting or visiting Bangalore Bio with a vast array of support services.

Leveraging our complementary strengths

India is seen as a market, which offers great potential for Australian biotechnology companies. There are complementary strengths in India and Australia; we need to work together to leverage off those strengths for the good of both nations' industries.

AusBiotech CEO, Dr Anna Lavelle, says: 'We have been showcasing the opportunities of companies in both countries for several years and believe that the best is yet to come.'

'The greatest increase in engagement occurs after meeting partner organisations at conferences, like Bangalore Bio or the AusBiotech 2010 conference in Australia (held in October in Melbourne), where business matching and personal relationships are central to partnering.' ■