

CANADA INTENSIFIES EFFORTS TO BRING NEXT GEN DRUGS TO MARKET

OF ANTIBODIES AND BIOLOGICS (CCAB)

The opportunity

\$15 million for 2014-19

Over the past decade, antibodies have emerged as the fastest growing segment of the pharmaceutical market. Antibodies are proteins that function in the immune system to fight invading bacteria and viruses, and with modern engineering technologies, researchers have been able to develop antibodies that can be programmed to target cancer and other devastating diseases. Canada originated the biologics revolution with the discovery of insulin in 1921. Since this breakthrough, Canada has remained at the forefront of basic biological research. Canada's leading centre for the production of high-quality antibody (Ab) and biological products – the Toronto Recombinant Antibody Centre (TRAC) – is now taking full advantage of the commercial opportunities of antibodies with support from the CECR program.

NCE program

Centres of Excellence for Commercialization and Research

Headquarters

Toronto's Recombinant Antibody Centre, University of Toronto

Centre director



Sachdev Sidhu

Board chair



Richard Lerner, former president, Scripps Research Institute





How CCAB is seizing the opportunity

The Centre for the Commercialization of Antibodies and Biologics will enable the commercialization of biologics by filling three voids in the Canadian system: a shortage of process and manufacturing know-how and funding needed to convert Abs into commercial products, a lack of knowledgeable and dynamic business leadership in biotherapeutics, and too few connections with international finance and industry to facilitate late-stage drug development. The CCAB is starting from a position of strength by leveraging TRAC's base of industrial and academic partners, world-class technology platform, large repertoire of Abs products, critical background intellectual property and biology, and experienced product development and business professionals. Promising technologies will be positioned for clinical trials and then partnered with new or existing companies for market launch.

Among the expected results

- · Blueline Bioscience, a biotech incubator established by Toronto-based venture capitalist Versant Ventures, has chosen TRAC and CCAB to be its first major partners for commercialization.
- TRAC is in late-stage discussions for an agreement that would generate up to \$100 million in funding from Versant and Celgene Canada to commercialize four Ab programs through a new Toronto company.
- · CCAB will work with Indian genomics company, SciGenom, to establish a company to supply reagent Abs to the Indian market.
- Partnerships with other CECRs, including MaRS Innovation, the Centre for the Commercialization of Regenerative Medicine and the Centre for Drug Research and Development will fill CCAB's pipeline with new intellectual property and projects.
- Between four and five new companies will be created and 10 technologies licensed or co-developed over the next five years.
- · CCAB will foster basic research projects (from discovery to "lead selection") with large institutions, including the Princess Margaret Cancer Center, Hospital for Sick Children, Mount Sinai Hospital and Ontario Institute for Cancer Research.
- · Over a dozen Abs targeting cancer and other diseases are ready to move into CCAB's development pipeline. Over the next five years, CCAB expects to manage the commercialization of more than 10,000 Ab reagents.





