

THE Research
Universities' Council
OF BRITISH COLUMBIA



Quick Facts on BC's Research Universities, Technology and Innovation

1

BC's modern economy depends on research excellence and the generation of new knowledge

- Research is an essential building block of innovation. Innovation, in turn, is a key determinant of productivity growth and economic success for all sectors of BC's economy, including natural resources, biotechnology and information and communications technology.
- BC's universities perform more than 40 percent of all the research conducted in BC, almost all of which is conducted by the six Research Universities' Council members¹.
- The annual economic impact of UBC, SFU, and UVic is estimated at \$22 billion, of which over \$8 billion can be attributed to new knowledge and knowledge transfer. The remaining \$14 billion is attributed to direct spending, student spending, visitor spending and the impact of a university education.²

2

BC's research universities drive commercialization and business innovation

- BC's research universities are running entrepreneurship@programs, expanding the mandate of their university/industry liaison offices, hiring entrepreneurs-in-residence and offering students co-op and internship opportunities with business.
- Over \$65 million in research activity at BC's universities is contracted annually by private sector firms who use BC's universities to help them with the challenges and opportunities they face.³
- UBC alone has spun-off more than 100 life sciences companies, creating more than 2,500 jobs and raising more than \$2 billion in private investments.⁴
- The Centre for Drug Research and Development, located at UBC, has successfully advanced 80 new technologies toward commercialization and built strategic international partnerships that are transforming research into new treatments.⁵ 4D LABS, located at SFU, is being used by businesses to advance the development of next generation technologies in clean energy, health care, information technology, environment and agriculture.⁶ Businesses at UVic's Vancouver Island Technology Park generate well over \$300 million in annual revenue and support more than 2,000 direct and indirect jobs.⁷

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3

Graduates from BC's research universities are principle conduits of knowledge transfer

- Knowledge transfer from universities to businesses primarily occurs through the employment of post-doctoral, graduate and undergraduate students who have had exposure to leading edge knowledge and a learning experience that promotes critical thinking and innovation. These students are the new generation of leaders on whom the success of BC's knowledge-based economy depend.

4

Research infrastructure is a key foundation

- Since 2001 the Province has invested over \$550 million from the BC Knowledge Development Fund (BCKDF) to support research infrastructure has enabled BC to remain at the leading edge of international research and has leveraged into the province almost \$1 billion in direct matching grants through the Canada Foundation for Innovation, industry and other sources.⁸
- Whether they are breeding pine-beetle resistant trees, supporting geothermal energy development, commercializing drug research or improving health treatments, BCKDF investments are supporting researchers at BC's universities to turn discoveries into innovations.

5

BC's researchers excel in attracting federal funding

- Since 2000/01, BC researchers have increased their share of federal research agency funding at a rate greater than Ontario, Quebec and Alberta. BC now ranks second among provinces in per capita funding from federal research agencies, compared to seventh in 2000/01.⁹

6

Health research supports improved health care

- Hundreds of millions of dollars invested by the Province in research university partners, such as the Michael Smith Foundation for Health Research and Genome BC, have significantly increased BC's ability to attract and retain the brightest minds and support them with the tools needed to innovate and deliver cures, new approaches to treatment, and more efficient health services. Made-in-BC solutions are transforming the response to global health issues, including HIV/AIDS, the SARS virus, breast cancer, and H1N1 influenza.

7

BC's internationally networked research universities are conduits for the world's knowledge

- The international standing of BC's research universities (UBC, UVic and SFU all ranked in the world's top 250 universities, with UBC ranked 32nd)¹⁰ provides substantial links to Asian and other overseas research organizations and enhances the Province's reputation as a place to invest. In addition, UNBC is ranked Canada's top primarily undergraduate university, TRU is a leader in international education, and RRU is a leader in the provision of education to career professionals.

Sources

¹ Statscan, CAUBO
² UBC, SFU and UVic
³ Statscan
⁴ LifeSciences BC
⁵ CDRD
⁶ SFU
⁷ UVic
⁸ Government of BC
⁹ CAUBO
¹⁰ Times Higher Education