Life Sciences in Saskatchewan



Saskatchewan has a strong life sciences cluster, including national and international players with worldwide reputations.

Our Competitive Edge

- Life Science underpins many aspects of our daily lives whether through health and medicine or in applications in support of food production and agriculture, energy or environmental challenges and material sciences and other areas.
- Innovation thrives in a dynamic hub like Saskatchewan's Innovation Place in Saskatoon, where industry, academia and supporting interests and infrastructure come together. Innovation Place has emerged as one of North America's renowned research parks for agricultural biosciences, vaccines and immunology and environmental science.
- <u>The University of Saskatchewan (U of S)</u> is a world leader in agricultural crop research, plant breeding as well as food processing. The University of Regina (U of R) has strengths in environment, informatics and health research, including a a gerontology research centre.
- <u>The Canadian Light Source</u> Canada's synchrotron facility (Saskatoon) – is an important research and analytical tool supporting fundamental and applied life sciences, agriculture related imaging, as well as drug research and medical imaging. Saskatoon's adjacent Cyclotron facility enables labelled isotope imaging to also take place.
- The Saskatchewan Research Council (SRC) provides DNA testing and other industry services like custom DNA analytics and marker development.
- Industry activity in Life Sciences in Saskatchewan covers plant breeding, soil and microbial inoculants and stimulants, environmental sciences and fermentation, animal health technologies and of course human health applications and study.
- The Vaccine and Infectious Disease Organization— International Vaccine Centre (VIDO-InterVac) is a world leader in developing vaccines and immunity-enhancing technologies against infectious diseases, and one of the largest BL3 facilities of its kind in North America allowing animal challenge studies.



- The Global Institute for Food Security (GIFS) conducts
 research advancing understandings of soil, microbe and
 root interactions as well as on plant imaging to support
 genomics based breeding of crops using OPAL (Omics
 and Precision Agriculture Laboratory. Canada's only
 lab providing integrated omics analyses and precision
 agriculture technologies.
- <u>Saskatchewan Polytechnic</u> has expanded its applied research capacity in manufacturing and biotechnology. it is home to teh Digital integration Centre of Excellence (DICE) and the Innovative Manufacturing Centre (IMC).

Innovation and Opportunity

Build on our Research Strength

- · Nutrition, aging and health
- · Health delivery and services research
- Neurosciences and chronic pain
- · Cardiovascular and stroke research
- Infectious diseases, zoonosis and immunology
- Vaccine technology and rational drug design
- Disease diagnostic protocols
- Advanced biomedical imaging



Life Sciences in Saskatchewan

Ag Biotech – Setting the Pace

- Saskatchewan remains a key crop breeding centre for Western Canada and a global breeding centre for canola. Current efforts include applying genetic tools and using genomic information as well as assessing agronomic performance, utilizing imaging a data along with other tools to quickly yield best results and insights.
- The province is home to North America's largest legume and cereal microbial inoculant manufacturing base with ongoing research and development of new products and bio-inoculants.
- Canada's agricultural genomics centre in Saskatoon is at the forefront of 'omics' research, including genomic plantrhizosphere interactions analysis.
- The <u>Canadian National Wheat Cluster</u> which runs from 2018-2023, are integrating complementary areas of expertise in wheat breeding, genomics, biotechnology and pathology across a number of academic and government research centres.
- The Global Institute for Food Security (GIFS) builds on Saskatchewan's existing strength in crop production, food systems and its natural advantages to support global food security initiatives. Using Genomics and Phenomics and infomatic data tools the institute is 'open for business' collaborations.

Opportunities for Growth

Join us to expand and build our strengths in:

- New crop varieties and crop development
- · Application of AI and Data use in life sciences
- Microbial bio-controls, bio-fertilizers and plant nutrient systems
- Bio-Pharmaceuticals
- Animal health products, animal vaccines and food safety products.

Work with us to develop and market emerging product areas:

- · Biological water quality detection systems
- · Cosmetics and skin care products
- · Bio-actives and use of bio-industrial feedstock
- Ag-West Bio is the provincial sector organization funded to work with industry to advance life science market applications in agricultural, environmental, industrial, energy and bio-processing, and health and nutrition markets.

The Bottom Line

- Saskatchewan offers a secure business friendly culture of innovation and a sensible regulatory environment for companies to thrive.
- The Corporate Capital Tax for businesses has been eliminated.
- The Corporate Income Tax rate for manufacturers in Saskatchewan can be as low as 10% through our manufacturing and processing profits tax reduction.
- The Investment Tax Credit for building, machinery equipment purchases for manufacturing and processing is a fully refundable 6% tax credit.
- 100% of eligible R&D expenses can be used against net income for calculating federal tax credits
- Saskatchewan offers a 10% provincial tax credit for scientific research and development expenditures.

No General corporate tax rate

No Payroll tax

No Health premiums

10% Non-refundable tax credit for R&D expenditures

6% Provincial sales tax; lowest of all provinces

6% Refundable investment tax credit on manufacturing and processing equipment.



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