The Big Issue
Big Impactful Genomics

2018-2019 Annual Report
Genome Prairie’s role is to align partners and resources to develop and manage genomics and related bioscience projects in Manitoba and Saskatchewan.

As a result, researchers can address key regional priorities including agriculture and agri-food, precision health, the environment, energy and natural resources. These efforts play a central role in building the Prairie region’s reputation as a location of choice for research, innovation and commercialization.

Genome Canada’s business model is based on partnerships with each Canadian region. Given the scope, Genome Canada mandates that every program launched has co-funding partners and every project or initiative has support.

**OUR MISSION**

To accelerate and leverage knowledge translation of genomic discoveries to provide social and economic benefits for the people of Manitoba and Saskatchewan.

**OUR VISION**

Genomics will change what we know today and how we live tomorrow.
Project Development

With offices in Saskatoon and Winnipeg, Genome Prairie identifies and refines new project opportunities, facilitates national and international collaboration, and aligns partners and resources to ensure the success of selected research projects. Genome Prairie serves as an engine for economic development.

Research Management

Our projects are at the forefront of research and development in genomics and related biosciences. Genome Prairie’s team strives to bring together significant expertise and resources from different academic institutions and industries across Canada. The scale and complexity of these initiatives requires strong project management to optimize successful completion of goals and objectives.

Community Engagement

Success in any scientific field often depends on factors beyond the lab bench. Relationship building and information sharing are critical activities that can lead to unexpected connections and innovation. Through communications and outreach activities, Genome Prairie helps strengthen the Prairie research community and the talent it attracts.

Big Impact

Through collaboration, Genome Prairie’s operational activities and investments in projects create economic and social contributions in Manitoba and Saskatchewan.

Some of the ways Genome Prairie has a BIG impact include:
- Leveraging funding
- Building public and private sector partnerships
- Developing new technologies
- Acquiring patents
- Facilitating industry solutions
- Advancing local talent
- Contributing to training and employment opportunities

Genome Prairie’s leadership and strategic direction are provided in partnership with our Board. Representing an array of industry and research professionals, our Board volunteers their time and expertise to ensure the continued success of our organization.

Gerald Brown (Chair)
Mitchell Abrahamsen
Daphne Arnason
John Cross

Digvir Jayas
David Migadel
Jenisa Naidoo
Curtis Rempel

Genome Prairie’s team engages and aligns our partners with the resources necessary to develop and manage bioscience research projects that address regional and national priorities.

Mercedes Alcock
Lab Manager, Genome 360
Amber Bass
Lab Assistant, Genome 360 (term)
Shawna Bieber
Program Manager
Beth Ireland
Director of Communications & Corporate Secretary
Faye Pagdonsolan
Office Manager & Human Resources
Patrick Pitka
Chief Financial Officer
Reno Pontarollo
President & Chief Executive Officer
Simon Potter
Chief Scientific Officer
Virginia Tomas
Accountant
MESSAGE FROM THE CHAIR

What’s Next?

Annual reports tend to concentrate on the past but I’m particularly excited about the present and future at Genome Prairie.

Our organization’s strategic priorities continue to be aligned with those of the two provinces where Genome Prairie is located – Saskatchewan and Manitoba – with world-class benefits accruing here, and applications across Canada and around the world.

This year saw the launch of the Genome360 initiative and MOBILE lab in Manitoba. Genome360 is focused on highly specialized training and the application of genomic technologies to crops, pests, the environment, and livestock and human health. A similar initiative is rolling in Saskatchewan. Both will serve customers and partners from across Canada, in both urban and remote communities.

Targeting genomic solutions for agriculture, agri-food, fisheries and aquaculture, Genome Canada’s 2018 Large-Scale Applied Research Project (LSARP) competition was a good one for Genome Prairie. Projects developed and led by our regional scientists were awarded three LSARPs (for a total of $24.2 million in funding over four years), with a co-lead on a fourth, out of a total of eight LSARPs across the country.

We look forward to exciting and innovative genomics and biosciences discoveries and applications emerging from these scientists over the next few years.

The Genome Prairie team, an exceptionally competent, cohesive and dedicated group led by a very capable and committed CEO, continues to strengthen. Also strengthening are our relationships with our provincial and federal stakeholders – including industry, government and academic institutions.

Finally, I’d like to thank our dedicated Board of Directors for their insight, guidance, collective wisdom and support over the past year.

Gerald Brown
Chair

CEO MESSAGE

BIG may be the theme of this annual report, but it was the strength of Genome Prairie’s small project development team that really rose to the occasion over the past year. I want to congratulate our CSO Simon Potter for spearheading this important work.

The result was three 2018 Large-Scale Applied Research Project (LSARP) leads and one co-lead for the Prairie region. The projects chosen for funding range from enhancing lentil variation and harnessing wheat diversity to pen-side diagnostic tests for cattle and eDNA profiling for freshwater fish. I could not be prouder of all the teams involved in Genome Canada’s LSARP competition. This research reflects some of the biggest agribusiness in our country and I continue to be impressed by the sheer scale of the work our project management team supports. I especially want to recognize the co-founders of these projects.

This was also a year of winding down earlier projects. One example is PLM – Augmenting the Plant Microbiome to Improve Crop Yield and Stress Resilience. PLM is a Genomic Applications Partnership Program (GAPP) project and provided tremendous advantages for its industry partner, Indigo Ag, which was named number one on the 2019 CNBC Disruptor 50 company list.

We look ahead to another year of fruitful partnerships with our provincial and federal stakeholders, as well as academic institutions and private industry. Lastly, I would like to thank our Board of Directors for their continued stewardship under the excellent leadership of Gerry Brown.

Reno Pontarollo
President & Chief Executive Officer

CSO MESSAGE

My first full year as Chief Scientific Officer of Genome Prairie was a BIG one. In March, we successfully launched the Genome360 initiative in Manitoba and I’m proud to say that the same program is now coming to Saskatchewan. This initiative is a way to truly bring genomics and other biosciences-based solutions – and understanding – to our communities.

A project that has me really excited is FLOWTER – Floating Wetlands to Enhance Remediation. The International Institute for Sustainable Development Experimental Lakes Area in northwestern Ontario is the only place in the world where this type of freshwater research could take place. Under the direction of Vince Palace, FLOWTER is high impact and high visibility every step of the way. The findings of this innovative research will help inform decisions made about transporting oil by truck, rail or pipeline across Canada.

In other news, Uladzimir Karniychuk and his research team at VIDO-InterVac, supported by Genome Canada’s Emerging Issues program, were able to respond quickly and develop a swine model of Zika virus infection to investigate how it causes disease. I believe the flexibility of programs like Emerging Issues can allow recent outbreaks, such as Ebola in humans and African swine fever in wild and domesticated pigs, to be addressed quickly and effectively.

I anticipate another exciting year ahead.

Simon Potter
Chief Scientific Officer
GENOMICS ON THE MOVE

Genome360 Initiative

Genome360 is an initiative started by Genome Prairie and its funding partners to build a hub for genomics and related capabilities in Manitoba. Genome360 has the potential to bring big benefits to its stakeholders.

With an investment of $2.3 million, the initiative aims to be a catalyst for the Prairies’ rise to prominence in the genomics sector.

In partnership with Westward Industries, Genome360 developed a prototype Molecular Biology Interactive Learning Enterprise (MOBILE) lab to demonstrate and offer organizations access to field-deployable devices. This electric-powered MOBILE lab provides storage, transportation, and workspace to bring a lab into the field, factory or classroom.

Simon Potter is Genome Prairie’s Chief Scientific Officer and has a reputation as a global expert in biomaterials design and processing.

“The Genome360 initiative provides a unique combination of capacity and expertise for the wide distribution and democratization of advanced genetic technologies in the province of Manitoba and beyond,” says Potter. “We’re working with the community to realize the economic and social benefits inherent in this exciting venture.”

Genome360 partners with academic institutions to introduce genomics and phenomics to secondary and post-secondary students. Locating Illumina’s iSeq100 benchtop sequencer at Red River College in Winnipeg also brings hands-on learning to students studying a variety of science-based programs.

Going further, in partnership with Western Economic Diversification Canada and Saskatchewan Polytechnic, the Genome360 initiative is now rolling out in Saskatchewan.

“The Manitoba community’s response to the Genome360 initiative has been overwhelmingly positive and demand for the services it can offer has been strong since its inception. It’s clear that Manitoba is ready to move to the forefront of the genomic economy and Genome360 is a mechanism to take it there.”

Mercedes Alcock is the Lab Manager for Genome360 in Manitoba and has been an integral part of the implementation of this ambitious initiative.

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The wheat-focused CTAG2 project emerged from Genome Canada’s 2014 Large-Scale Applied Research Project (LSARP) competition in agriculture and agri-food. Genome Prairie is the lead Genome Centre managing the project.

Curtis Pozniak and Andrew Sharpe, both of the University of Saskatchewan, head the CTAG2 research team. Pozniak is a wheat breeder and a geneticist with the U of S Crop Development Centre.

"Essentially, we have completed the wheat genome jigsaw puzzle with all the pieces put together in their correct positions and order, providing an enormous advantage for breeders when searching for genes that control important traits in the crop," says Pozniak. "This breakthrough research will help produce better wheat varieties over the long term."

The groundbreaking CTAG2 project is part of an international collaboration to sequence the entire wheat genome and to characterize genetic variation influencing critical traits targeted by Canadian wheat breeders.

Pozniak’s 4D Wheat project has also been selected for funding through Genome Canada’s 2018 LSARP competition in agriculture, agri-food, fisheries and aquaculture. The project’s co-lead is molecular geneticist Sylvie Cloutier of the Ottawa Research and Development Centre, Agriculture and Agri-Food Canada.

4D Wheat (Diversity, Discovery, Design and Delivery) will focus on the benefits of wheat genetic advancement, genomics, the diversity of elite wheat varieties, international wheat testing protocols and new variety adoption.
Biochemist and University of British Columbia professor Leonard Foster grew up with bees on his parents’ hobby farm. “I focused all of my high school science projects on bees,” he says. “I’m a big fan of honey and I don’t buy much sugar anymore.”

BeeOMICS, a 2014 Large-Scale Applied Research Project (LSARP) in agriculture and agri-food, is led by Genome British Columbia and Ontario Genomics. Due to the nature of the industry, a lot of the project’s data collection took place at Saskatchewan honey bee colonies. The BeeOMICS team worked with 40 commercial beekeeping operations and 600 bee colonies across Canada.

Bee colonies have a complex work and breeding structure with one queen, many male drones for breeding and female worker bees doing everything else. One of the honey bee industry’s largest challenges is controlling Varroa mites. The parasite attacks bees and is a major threat to the world’s honey bee population.

The BeeOMICS research project focused on hygienic behavior, where healthy bees remove dead or dying nest mates from the colony to prevent further contagion. The trait helps honey bee colonies resist disease. But how does a bee sense the presence of a dead or dying nest mate? And what are the genetic markers for this behaviour?

“Over the last 10 to 12 years, beekeepers have been experiencing a loss of a quarter to a third of each honey bee colony each year due to disease and habitat loss. No other livestock could sustain this amount of loss. Our research will help contribute to knowledge of honey bee colony viability.”
A partner on the OSS project is Lallemand Plant Care, a global company that develops and commercializes microbe-based technologies. Additional funding is also provided by the Western Grains Research Foundation.

Yost and his team are working to create superior rhizobial inoculant strains to both improve tolerance to drying out and subsequent on-seed survival. They are using a technique called genome shuffling, which with appropriate selection pressures, can accelerate evolutionary changes.

The team has also developed a high-throughput phenotyping approach to boost the volume of genome shuffling. The end goal of the OSS project is a better product with higher performance for soybean and pulse crop farmers.

"Ideally, farmers will have access to new technological advances in inoculant products that will increase yields and profits while promoting sustainable agricultural practices and, as a result, support a measure of environmental and economic sustainability," says Yost.

Molecular biologist and project lead Chris Yost from the University of Regina specializes in inoculants. He describes his team’s on-seed survival research as “high risk and high reward. It’s well-suited as an academic-industry partnership project.”

Microbial inoculants are added to seed to promote crop yield through biostimulation and biofertilization, but they must remain viable and perform well in the field after several months of storage. This is called on-seed survival. An example includes inoculants based on *Rhizobia* bacteria – frequently used to promote legume yields. The challenge is to find microbes that can deliver consistently.
A LARGE-SCALE FRESHWATER LABORATORY

FLOWTER – Floating Wetlands to Enhance Remediation

Relatively new on Genome Prairie’s roster is FLOWTER, a project funded through the Genomic Applications Partnership Program.

Project lead Vince Palace is an aquatic toxicologist and adjunct professor at the University of Manitoba. He is also head research scientist at IISD Experimental Lakes Area (IISD-ELA) – a natural laboratory of 58 small lakes set aside for scientific research in northwestern Ontario.

“FLOWTER addresses how best to deal with the oil that remains after spill cleanup takes place in a freshwater system,” Palace says. “Specifically, the project will examine how to enhance the activity of native bacteria to degrade residual oil. We are simulating oil spills to explore the impact of crude oil and diluted bitumen on lakes.”

In 1969, IISD-ELA was set aside for research by the federal government and its lakes are relatively free from fishing pressure or direct human influence. The area is now under the banner of the International Institute for Sustainable Development, an independent think tank. IISD-ELA is particularly valuable as its full 50 years of activity provides “very good baseline data.”

“IISD-ELA is unique because we can conduct whole ecosystem experiments,” says Palace. “We also have special legislation at the provincial and federal levels that allows us to manipulate lakes, including intentionally introducing trace levels of contaminants for scientific investigations. Of course, most of our lakes remain untouched serving as reference systems so that we can study natural processes.”

FLOWTER uses engineered floating wetlands – scalable platforms supporting native aquatic plants. Long root systems extend beneath each platform supporting an active bacterial community. Together, the plants and bacteria conduct an active exchange of nutrients and oxygen that degrades residual oil more rapidly than either can accomplish alone.

To allow detailed genetic analysis of the bacteria and conditions required to maximize oil consumption, the FLOWTER platforms will stay in place at the experimental spill sites for two years (including over the winter). Wildlife will be protected from the simulated oil spills using bird and predator mesh netting.

“Our findings will provide information for stakeholders on how best to address residual oil at spill sites,” Palace says.
NOT YOUR GRANDFATHER’S ARCTIC EXPEDITION

GENICE – Microbial genomics for oil spill preparedness in Canada’s Arctic marine environment

Almost 175 years after Sir John Franklin’s ships Erubus and Terror met their end frozen in the Arctic ice, climate change is opening the Northwest Passage for travel as well as possible oil exploration and transportation.

Gary Stern from the University of Manitoba is co-leading a team that’s using microbial genomics to generate evidence on the role and potential for natural bioremediation to deal with oil spills in the Arctic Ocean. Casey Hubert from the University of Calgary co-leads the project with his focus on marine and deep biosphere microbiology. The project is GENICE, a 2015 Large-Scale Applied Research Project (LSARP) in natural resources and the environment.

“One of the approaches to mitigating oil spills in marine waters is through natural attenuation,” Stern says. “This is when microorganisms, that are naturally present, biodegrade the petroleum hydrocarbons thereby reducing the spill’s negative impact. Right now, we have a window of opportunity to develop emergency preparedness plans before future oil exploration in the Arctic region.”

The GENICE team has access to robust research facilities, including the University of Manitoba’s Sea-ice Environmental Research Facility (SERF), the new $50 million Churchill Marine Observatory (CMO), the Churchill Northern Studies Centre (CNSC), the Arctic Research Foundation research vessel William Kennedy and the Canadian Coast Guard’s Amundsen research icebreaker.

“GENICE is a wonderful project – it’s very applied,” Stern says. “We want to inform policy going forward. Decision-makers in government, industry and Indigenous organizations need to be familiar with strategies for oil spill mitigation. None currently exist in sub-zero temperature Arctic marine waters.”

Right now, we have a window of opportunity to develop emergency preparedness plans before future oil exploration in the Arctic region.
INDEPENDENT AUDITORS’ REPORT

To the Directors of Genome Prairie

Opinion
We have audited the consolidated financial statements of Genome Prairie (the Entity), which comprise:

- the consolidated statement of financial position as at March 31, 2019
- the consolidated statement of operations and changes in net assets for the year then ended
- the consolidated statement of cash flows for the year then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements, present fairly, in all material respects, the consolidated financial position of the Entity as at March 31, 2019, and its consolidated results of operations and its consolidated cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion
We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the “Auditors’ Responsibilities for the Audit of the Financial Statements” section of our auditors’ report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity’s financial reporting process.
Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

• Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

• Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.

• Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

• Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

• Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

• Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

• Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

KPMG LLP
Chartered Professional Accountants
Saskatoon, Canada
June 25, 2019

GENOME PRAIRIE
Consolidated Statement of Financial Position
March 31, 2019, with comparative information for 2018

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<thead>
<tr>
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<td><strong>Total Assets</strong></td>
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<table>
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<tr>
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<th>2018</th>
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<td><strong>Liabilities and Net Assets</strong></td>
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<td>Current liabilities:</td>
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<td>Accounts payable and accrued liabilities</td>
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<td><strong>Total Current Liabilities</strong></td>
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<td><strong>Total Liabilities and Net Assets</strong></td>
<td>2,809,149</td>
<td>3,995,465</td>
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</table>

Commitments (note 5)

See accompanying notes to consolidated financial statements.

On behalf of the Board:

[Signatures]

[Signatures]

1
GENOME PRAIRIE
Consolidated Statement of Operations and Changes in Net Assets
Year ended March 31, 2019, with comparative information for 2018

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td>Revenue:</td>
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<tr>
<td>Project revenues</td>
<td>$5,033,811</td>
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<td>Administrative support revenues</td>
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<td>Interest income</td>
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<td><strong>Total Revenue</strong></td>
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<td>$6,116,965</td>
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<td>Expenses:</td>
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<td>Project expenditures</td>
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<td>$5,104,167</td>
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<tr>
<td>General and administrative</td>
<td>$1,034,215</td>
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<td>Project development</td>
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<td><strong>Total Expenses</strong></td>
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<td>Excess of revenue over expenses</td>
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<td>Net assets, beginning of year</td>
<td>265,487</td>
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<tr>
<td><strong>Net assets, end of year</strong></td>
<td>$265,487</td>
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</tbody>
</table>

See accompanying notes to consolidated financial statements.

GENOME PRAIRIE
Consolidated Statement of Cash Flows
Year ended March 31, 2019, with comparative information for 2018

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Cash flows from (used in):</td>
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<tr>
<td>Operations:</td>
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<td>Excess of revenues over expenses</td>
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<td>$</td>
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<tr>
<td>Change in non-cash operating working capital:</td>
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<tr>
<td>Accounts receivable</td>
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<td>GST receivable</td>
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<td>Prepaid expenses</td>
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<td>Accounts payable and accrued liabilities</td>
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<td>Deferred contributions</td>
<td>(1,768,542)</td>
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<td><strong>Increase (decrease) in cash and cash equivalents</strong></td>
<td>$(1,063,180)</td>
<td>$(55,207)</td>
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<td>Cash and cash equivalents, beginning of year</td>
<td>3,121,400</td>
<td>3,176,607</td>
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<tr>
<td><strong>Cash and cash equivalents, end of year</strong></td>
<td>$2,118,220</td>
<td>$3,121,400</td>
</tr>
</tbody>
</table>

Cash and cash equivalents consist of:
<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$1,118,220</td>
<td>$2,121,400</td>
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<tr>
<td>Investment certificate</td>
<td>1,000,000</td>
<td>1,000,000</td>
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<tr>
<td><strong>Total</strong></td>
<td>$2,118,220</td>
<td>$3,121,400</td>
</tr>
</tbody>
</table>

See accompanying notes to consolidated financial statements.
1. Nature of business:

Genome Prairie (the "Corporation") was incorporated in 2000 under the Canada Corporations Act, and transitioned in 2013 to the Canada Not-for-profit Corporations Act, as a not-for-profit organization. The Corporation funds organizations and institutions that conduct genomic research and development for the economic benefit of the Prairie Region (Saskatchewan and Manitoba) and Canada. The majority of Genome Prairie's operational funding is received from Genome Canada.

2. Significant accounting policies:

(a) Basis of presentation:

The consolidated financial statements include the accounts of the Corporation and its subsidiary, Interna BioSciences Inc.

These financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations ("ASNPO").

(b) Use of estimates:

The preparation of financial statements in accordance with ASNPO requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses during the year. Actual results could differ from these estimates.

(c) Revenue recognition:

The Corporation follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

During the year ended March 31, 2019, the Corporation received a contribution from Western Economic Diversification in the amount of $721,375 related to the purchase of laboratory equipment. There is uncertainty related to the future ownership of this equipment. Therefore, the corporation has expensed this as project costs and recognized the corresponding contribution as project revenue.

(d) Cash and cash equivalents:

Cash and cash equivalents include cash on hand and short-term deposits which are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value.

2. Significant accounting policies (continued):

(e) Financial instruments:

Financial instruments are comprised of financial assets (including cash, accounts receivable, GST receivable, project advances receivable, and prepaid expenses) and financial liabilities (including accounts payable and accrued liabilities and project advances payable). Financial instruments are initially recognized at fair value and subsequent measurement is at amortized cost with investment income recorded on an effective interest basis, unless management has elected to carry the instruments at fair value. The Corporation has not elected to carry any such financial instruments at fair value. Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred. All other financial instruments are adjusted by transaction costs incurred.

Financial assets are assessed for impairment on an annual basis at the end of the fiscal year if there are indicators of impairment. If there is an indicator of impairment, the Corporation determines if there is a significant adverse change in the expected amount or timing of future cash flows from the financial asset. If there is a significant adverse change in the expected cash flows, the carrying value of the financial asset is reduced to the highest of the present value of the expected cash flows, the amount that could be realized from selling the financial asset or the amount the Corporation expects to realize by exercising its right to any collateral. If events and circumstances reverse in a future period, an impairment loss will be reversed to the extent of the improvement, not exceeding the initial impairment charge.

(f) Income taxes:

The Corporation qualifies as a tax exempt organization under Section 149 of the Income Tax Act.

3. Financial instruments and risk management:

The fair value of the Corporation's cash and cash equivalents, accounts receivable, and accounts payable and accrued liabilities approximate their carrying amounts due to the short term to maturity of these financial instruments.
3. Financial instruments and risk management (continued):

The Corporation has exposure to the following risks from its use of financial instruments:

Interest rate risk

The Corporation is exposed to interest rate risk arising from fluctuations in interest rates on amounts invested in interest-bearing accounts and investment certificates. Cash, when received, is deposited into an interest-bearing account which earns interest at a rate of 1.50%. The current investment certificate is a term deposit which earns interest at a rate of 3.25% and matures on March 17, 2021. The term deposit may be redeemed by the Corporation at any time prior to the maturity date without penalty.

Credit risk

The Corporation’s financial assets including accounts receivable are not exposed to significant credit risk since the majority of receivables are from government organizations.

Other risks

The Corporation has no significant exposure to liquidity risk, currency risk or other price risk. There is a concentration of risk due to the limited number of individual counterparties to the Corporation’s cash and cash equivalents and investment certificate.

4. Deferred contributions:

The Corporation receives funding from Genome Canada, Provincial Ministries, Western Economic Diversification Canada and other sources to be held, administered and distributed in accordance with the related funding agreements between Genome Prairie and the other parties. Deferred contributions relate to expenses of future periods and represent the unspent externally restricted funding and related investment income, which are for the purposes of providing funding to eligible recipients and the payment of operating and capital expenditures in future periods. The changes in the deferred contribution balances for the period are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening deferred contributions for expenses of future periods</td>
<td>$3,212,448</td>
<td>$3,469,456</td>
</tr>
<tr>
<td>Contributions during the year:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genome Canada</td>
<td>2,835,162</td>
<td>3,184,286</td>
</tr>
<tr>
<td>Province of Saskatchewan - Projects</td>
<td>210,000</td>
<td>965,414</td>
</tr>
<tr>
<td>Province of Saskatchewan - Project development</td>
<td>18,975</td>
<td>-</td>
</tr>
<tr>
<td>Western Grain Research Foundation</td>
<td>-</td>
<td>918,120</td>
</tr>
<tr>
<td>Genome Alberta</td>
<td>120,500</td>
<td>305,419</td>
</tr>
<tr>
<td>Manitoba Agriculture, Food and Rural Development</td>
<td>214,400</td>
<td>172,964</td>
</tr>
<tr>
<td>Western Economic Diversification</td>
<td>769,864</td>
<td>165,428</td>
</tr>
<tr>
<td>Research Manitoba</td>
<td>-</td>
<td>87,000</td>
</tr>
<tr>
<td>Manitoba Wheat &amp; Barley Commission</td>
<td>37,500</td>
<td>18,750</td>
</tr>
<tr>
<td>Workshops and other</td>
<td>-</td>
<td>250</td>
</tr>
<tr>
<td>North Forge Technology Exchange</td>
<td>68,709</td>
<td>-</td>
</tr>
<tr>
<td>University of Manitoba</td>
<td>3,770</td>
<td>-</td>
</tr>
<tr>
<td>University of Saskatchewan - Project development</td>
<td>52,371</td>
<td>-</td>
</tr>
<tr>
<td>Total contributions received</td>
<td>4,351,971</td>
<td>5,832,324</td>
</tr>
<tr>
<td>Total contributions available</td>
<td>7,563,519</td>
<td>9,301,780</td>
</tr>
<tr>
<td>Less amounts recognized as project revenues</td>
<td>(5,033,811)</td>
<td>(5,104,107)</td>
</tr>
<tr>
<td>Less amounts recognized as administrative support revenues</td>
<td>(1,023,956)</td>
<td>(944,356)</td>
</tr>
<tr>
<td>Less project development support</td>
<td>(61,843)</td>
<td>(40,859)</td>
</tr>
<tr>
<td>Closing deferred contributions for expenses of future periods</td>
<td>$1,443,906</td>
<td>$3,212,448</td>
</tr>
</tbody>
</table>
5. Commitments:

Funding commitments:

The corporation signed a funding agreement with Genome Canada on June 21, 2018, which applies to all funding awarded and provided to the Corporation from April 1, 2017 until such time that a new or amended agreement is signed or the agreement is cancelled.

Base funding

The Corporation received a Notice of Award from Genome Canada on May 5, 2017 approving administrative support funding up to a maximum of $734,800 per year, for a period of three years commencing April 1, 2017 and ending March 31, 2020. As a condition of funding under this Notice of Award, the Corporation is expected to secure co-funding from other sources in an amount at least equal to the contribution of Genome Canada, or provide Genome Canada with a documented plan to meet this requirement within a reasonable time period. As specified in the funding agreement, Genome Canada may provide funding to the Corporation notwithstanding the fact that formal commitments from other parties have not yet been secured. In such cases, funds provided in advance “in good faith” shall not be reimbursable in the event such commitments from other parties are not secured, but Genome Canada may then terminate the present agreement or suspend or reduce funding.

Project funding

Genome Canada has approved funding remaining of $1,643,585 to be provided to the Corporation for ongoing and future research projects. In accordance with the funding agreements, the Corporation will secure additional financial contributions or in-kind commitments at amounts specified in the Notice of Awards issued by Genome Canada. As at March 31, 2019, the Corporation had $6,877,741 in co-funding related to these projects still to be applied.

Lease commitments:

The Corporation has entered into a sub-lease agreement for its Saskatoon office space expiring on March 31, 2019. A new lease is being negotiated. The approximate annual rental is $70,000. The Corporation has also entered into a sub-lease agreement for its Winnipeg office space expiring on March 31, 2020, unless terminated prior to this date. The length of notice of termination required is six months. The approximate annual rental is $40,000.

6 Comparative figures:

Certain comparative figures have been reclassified to conform with the financial statement presentation adopted in the current year.