GenomePrairie

HIGHLIGHTS

2012-13

ABOUT US

GENOME PRAIRIE PLAYS A CENTRAL ROLE IN BRINGING THE BENEFITS OF ADVANCED BIOSCIENCE RESEARCH TO MANITOBA AND SASKATCHEWAN.

We align the experts, investments and resources needed to address regional priorities and seize new opportunities for research and commercialization. Together with our partners, we are unlocking remarkable new discoveries in agriculture, health, energy, mining and the environment. These discoveries are accelerating the innovation and economic progress needed for greater prosperity and competitiveness in our region.

INTEGRATED APPROACH

PROJECT DEVELOPMENT

RESEARCH MANAGEMENT

COMMUNITY ENGAGEMENT

IMPACTS

- Diversifying our provincial economies.
- Attracting international, federal and industry investments into our region.
- Fostering innovation and commercialization in Manitoba and Saskatchewan.
- Creating knowledge-based jobs.

GenomePrairie

Message from the

CHAIRMAN OF THE BOARD

> AS A CATALYST FOR APPLIED RESEARCH AND DEVELOPMENT GENOME PRAIRIE PLAYS A KEY ROLE IN OPENING DOORS TO NEW ECONOMIC OPPORTUNITIES FOR OUR REGION.
>
> – Dr. Arnold Naimark

Advances in genomics and biotechnology help us to better understand, protect, and enhance our world and our standard of living. Applied genomics research yields significant opportunities to supply industries in Manitoba and Saskatchewan with the knowledge needed to innovate and compete around the world. Through developments such as superior crops, new bioproducts, enhanced oil and gas recovery, and novel medical diagnostics and therapeutics, applied genomics bolsters the region's position in strategically significant areas. As a catalyst for applied research and development, Genome Prairie plays a key role in opening doors to new economic opportunities for our region.

2012-13 has been a year of transition for Genome Prairie, with changes to our leadership team, an intensive review of our corporate activities and a shift in focus. The main feature of the shift is a targeting of initiatives to fit with specific circumstances of each of Manitoba and Saskatchewan and to allow joint (bi-provincial) developments to emerge opportunistically. In order to pursue this thrust in a balanced fashion, two senior positions were established in Manitoba to complement resources based in Saskatchewan.

The evolution of our strategic direction was motivated by our desire to continually enhance Genome Prairie's position as a leader in the Prairie innovation system; to facilitate the further development of our regional capacity and hence our competitiveness for attracting investment in applied genomics; and, to build significant new opportunities for innovation and commercialization in Manitoba and Saskatchewan.

Dr. Arnold Naimark
Chairman of the Board

Message from the

PRESIDENT AND CEO

At Genome Prairie, our role is to advance research opportunities that strengthen the bioeconomy. We create the right conditions so that new projects with important regional outcomes can move forward. We align partners and resources to unleash the innovation and commercialization necessary for growth in our region.

With genomics and related biosciences advancing at an incredible pace, we are seeing the science deliver on its promises in the form of remarkable new discoveries, products and services – from adapted crop varieties, new bioproducts, cleaner resource extraction and much more. Together with our partners, we have made significant investments that are allowing our region to make the most of these opportunities in genomics. I believe it is important to celebrate and share these success stories – to reflect on our achievements and highlight the impacts of our ongoing efforts and investments. I am very proud of our team and our accomplishments.

Beyond our project successes, one of the most exciting announcements this year has been Industry Canada's commitment of $165 million in multi-year funding for Genome Canada. This funding is enabling important new strategic investments including large-scale and international initiatives across the Canadian Genomics Enterprise.

Among these investments is the recently launched competition known as the Genomic Applications Partnership Program (GAPP). This new program offers valuable opportunities for regional researchers to partner with industry players to advance their technologies towards commercialization. GAPP represents a new stage in Genome Prairie's evolution, being driven by a growing focus on the application and commercialization of new technologies.

Looking forward, we will continue to strengthen our partnerships with regional stakeholders, the Canadian Genomics Enterprise, and key international entities to ensure that local companies and research institutions are well positioned to capture the benefits of innovation through commercialization. Our proactive efforts in project development, research management and community engagement will play a key role in enabling Manitoba and Saskatchewan to capitalize on opportunities in the bioeconomy.

Dr. Reno Pontarollo
President and CEO

> "... ONE OF THE MOST EXCITING ANNOUNCEMENTS THIS YEAR HAS BEEN INDUSTRY CANADA'S COMMITMENT OF $165 MILLION IN MULTI-YEAR FUNDING FOR GENOME CANADA.
>
> – Dr. Reno Pontarollo

Message from the

CHIEF SCIENTIFIC OFFICER

> IT IS GENOME PRAIRIE'S GOAL TO HELP LOCAL BUSINESSES AND RESEARCH INSTITUTIONS TAKE ADVANTAGE OF THE EXTRAORDINARY OPPORTUNITIES AT HAND ...
>
> – Mr. Chris Barker

The productivity and competitiveness of our region depend on its ability to innovate and bring new value-added products and services to market. Through our projects, we are working directly with end-users to bolster crop production, enhance mining processes and create new bio-based products – just to name a few.

The impacts our projects have in strengthening innovation, productivity and growth in the Prairie region are evident in the success stories highlighted in this document. By facilitating these projects, we are unlocking the tremendous potential for genomics while building a stronger knowledge-based economy in Manitoba and Saskatchewan.

The rapid pace of progress in genomics and related biosciences is increasingly recognized as a key driver affecting opportunities for local businesses and industries. Recognizing the important potential surrounding the application of genomics, we collaborated with Genome Canada and the other Genome Centres to consult with stakeholders and develop national strategies in the agri-food, forest, energy and mining, and fisheries and aquaculture sectors. These strategies are laying the foundation needed for the application of genomic solutions to boost business innovation, productivity and competitiveness.

It is Genome Prairie's goal to help local businesses and research institutions take advantage of the extraordinary opportunities at hand – particularly by ensuring that our projects address key priorities for Manitoba and Saskatchewan. With the launch of the new Genomic Applications Partnership Program, Prairie researchers now have an opportunity to apply their research in a manner that brings focused social and economic benefits to our region.

We also recognize the importance of building strong networks and engaging with community stakeholders to elevate the value generated by investments in research and development. Our ability to achieve results depends upon continued support from our partners across government, industry and academia. With this in mind, we will continue building upon these partnerships and enabling the application of genomics to enrich our region.

Chris Barker

Mr. Chris Barker
Chief Scientific Officer

CTAG: EXAMINING THE WORLD OF WHEAT

As a staple food, wheat contributes $4 billion to the Canadian economy—$11 billion when value-added products are included. Canada produces some of the best quality wheat in the world and public investment in research plays a critical role in keeping Canada in a lead position. Thanks to the Canadian Triticum Advancement through Genomics (CTAG) project, Canadian producers will be better positioned to maintain a competitive edge in the global market.

Project co-lead Curtis Pozniak says, "Before CTAG Canada played a limited role in large-scale wheat genomic research but now the CTAG project, and Canadian researchers, are becoming internationally recognized for our research on the wheat genome." CTAG is unique because it focuses on meeting the needs of Canadian wheat breeders. Pozniak explains, "when genomics programs are guided by curiosity-driven science rather than the users of the technology, the findings are not immediately relevant to breeders and producers." In the case of CTAG, wheat breeders defined the objectives, priorities and desired outcomes. "This was strategic. Any genomic tools identified can be quickly applied into our breeding programs," states Pozniak.

In addition to its regional focus, the CTAG project is also contributing to a larger international effort to sequence the wheat genome, which is five times larger than the human genome and nearly 40 times larger than the rice genome.

Two strategies are being used by the CTAG project team. The first is to sequence one of the 21 wheat chromosomes, which represents Canada's contribution to the International Wheat Genome Sequencing Consortium. The CTAG team is focusing on sequencing chromosome 1A, which contains several genes of importance to Canadian wheat breeders, including those related to end-use quality of wheat. The second strategy is to utilize a targeted sequencing approach, where only the genes of Canadian wheat varieties are sequenced

to better understand what genes make each variety unique. This knowledge will help breeders develop new varieties more efficiently. As genetic testing continues to become more efficient and affordable, it can replace other more expensive tests; for example, genetic markers for cadmium levels in durum wheat grain can be used instead of more expensive chemical analysis.

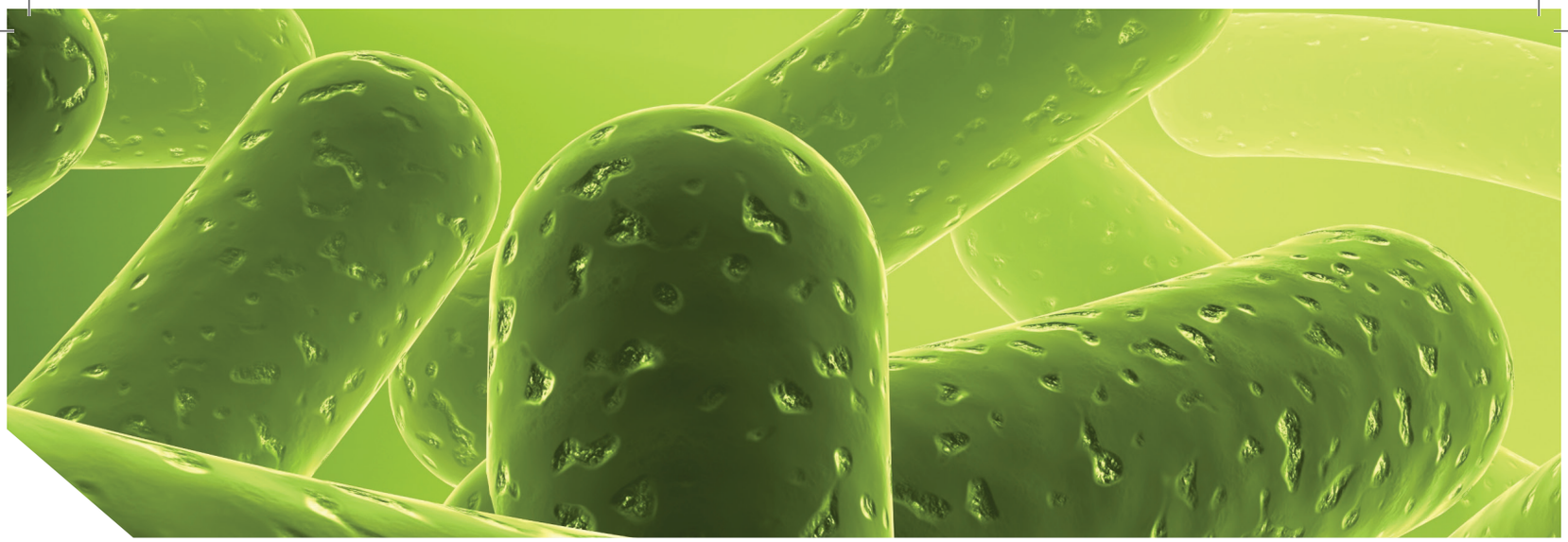
International collaborations have been critical to the success of the CTAG project and in reconnecting the Canadian wheat community to the rest of the world. By participating in the international effort to sequence the wheat genome, CTAG researchers are accessing expertise and information generated by their international partners.

The CTAG project is about more than sequencing the wheat genome. CTAG scientists are also examining wheat research funding models from around the globe to determine whether alternative agricultural policies should be adopted in Canada. In particular, the team is studying methods of public funding and how private investment can complement research supported by governments and producers.

Sequencing the wheat genome is simply the most recent technology in a long series of genetic tools that breeders and researchers have been using for generations. "It's a tool in a toolbox," explains Pozniak. "My sense is that breeding programs that fully integrate all of the tools available will be most successful. Our breeding programs at the Crop Development Centre in Saskatoon are taking a balanced approach to apply genomic strategies in the context of existing technologies. As we put all the knowledge together, we will generate advancements that will lead to more productivity for Canadian farmers."

> "THE GENETIC CODE IS THE BLUEPRINT. WE'RE GETTING CLOSER TO UNDERSTANDING THAT BLUEPRINT.
>
> – CTAG co-lead, Pierre Hucl, University of Saskatchewan

CTAG
Canadian Triticum Advancement through Genomics
www.cantag.ca



MAVEN: EXPLORING THE COMPLEX WORLD OF BIO-REMEDIATION

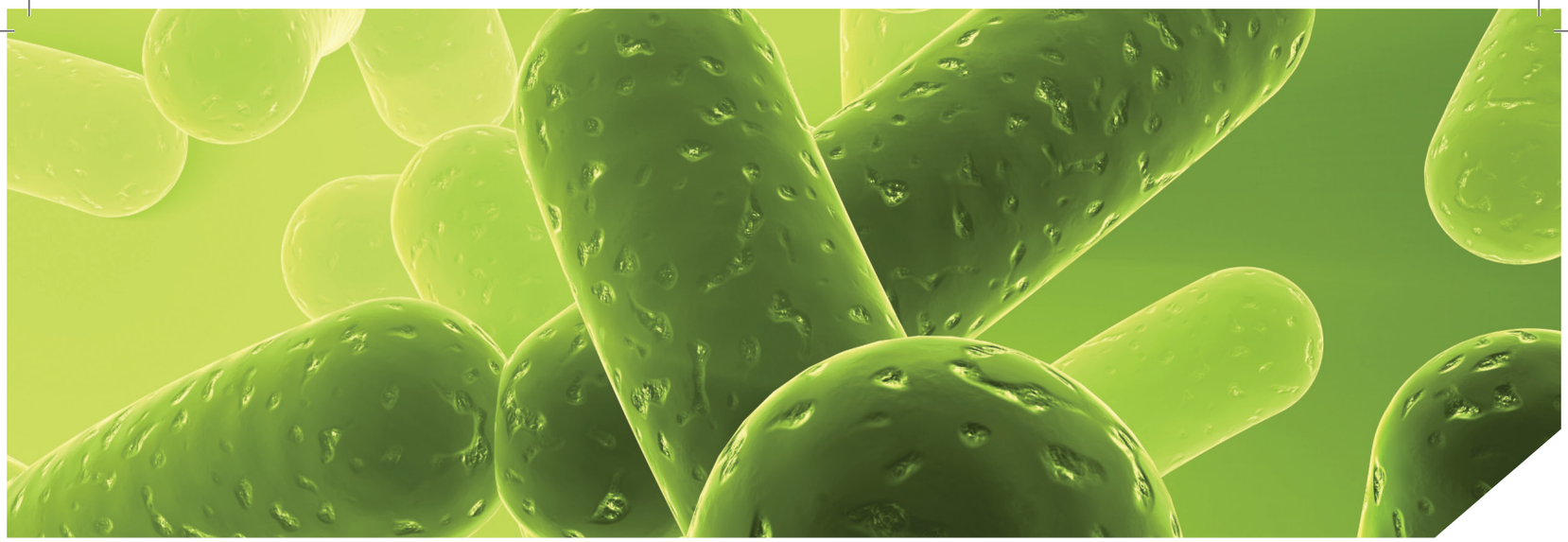
Nature has its own set of cleanup tools. With the advent of genomics research, we are only beginning to understand these tools' complexity and diversity. Microbes, including bacteria, algae, fungi and viruses, while given a bad reputation in our modern culture, offer far more potential benefits than they're given credit.

It is known that processes associated with mineral extraction can create by-products that have the potential to affect the environments into which they are discharged. What is less known is that microbes exist naturally which may have the ability to stabilize those by-products. The challenge is to determine what sorts of communities of microbes exist in these sites, and to encourage those most beneficial to become more active.

A tool required for meeting the challenge was developed in the Microbial Assessment for Value-Add, Environment and Natural Resources (MAVEN) project. MAVEN is best described, says Project co-lead Tony Kusalik, as "a pipeline involving software and lab techniques." Bio-informatics specialists developed a software pipeline that would help to analyze microbial populations. Combined with lab facilities at Contango Strategies Ltd., which include pilot-scale systems for real-world applications, the team has deepened their understanding of the microbes available to work with, and how to measure the results of bio-remediation activities.

"Bioremediation used to involve a lot of guesswork," explains Monique Haakensen, Project co-lead for MAVEN and owner of Contango. "With bioinformatics and genomics, where we used to have only a general understanding, we now know the identities of these organisms, the numbers and distribution of each type, how outside parameters can influence the populations, and we can compare them to similar populations elsewhere."

The MAVEN project has been developing and testing these tools in a pilot project that analyzes and compares microbial populations in lake



sediments both upstream and downstream of a site discharging effluent.

Possibly the most impressive outcome from the MAVEN project is that "data samples are showing tens of thousands of uniquely different types of microbes in these populations—the complexity is beyond our expectations." These complex populations change slowly over time and react to specific conditions. In many cases, it takes some simple encouragement, such as the addition of more oxygen, or a particular food or nutrient, to stimulate the microbes that are needed for efficient and effective stabilization and conversion processes, both necessary components of remediation.

Notably, "bioinformatics is a highly portable technology," says Kusalik, indicating there is great potential for use of the combined software and lab processes in many applications. Contango is already looking to apply the technology to its other projects in the areas of constructed wetland treatment systems, and remediation of natural gas wells, hydrocarbon contaminated soils, salt-impacted soils, oilsands water treatment, algae control, and much more.

Results from MAVEN are already being applied. "The tool is working for lake sediments, which are believed to be some of the most complex systems in the world. These tools can easily be applied to other applications, including human health," says Haakensen. Whether studying microbial populations in the human body, soil health, or water systems, MAVEN has raised the bar when it comes to understanding microbes.

> "THE POWER OF THE MAVEN PROJECT IS THE SERVICE TO INDUSTRY – INCORPORATING MICROBES INTO THEIR OPERATIONS IMPROVES REMEDIATION AND PROTECTS THE ENVIRONMENT.
>
> – Reno Pontarollo, President and CEO, Genome Prairie

MAVEN
www.mavenproject.ca

MGCB²: PUTTING MICROBES TO WORK TO MAKE FUEL AND PLASTIC

Wheat straw, mown grass and wood chips are generally viewed as waste products, but with a bit of ingenuity, these materials can be valuable feedstocks for biofuels and other products.

While biofuels are already being produced from waste products, the conversion process is currently complex and expensive. Ethanol, for example, requires that feedstocks be pre-treated with chemicals and enzymes. The Microbial Genomics for Biofuels and Co-Products from Biorefining Processes (MGCB²) project is using genomics tools to identify bacteria that can simplify and improve the process.

MGCB² is part of an international collaboration. The team has tapped into the National Renewable Energy Labs in the U.S., the New Zealand Geological Survey and SCION, a New Zealand research institute. These partnerships allow them to connect with bio-prospectors discovering novel organisms in hot springs, and other bio-engineering groups studying waste-to-commodity processes.

The team is studying bacteria that can convert woody materials composed of lignocellulose into sugars that can be processed into biofuels. They are analyzing which bacterial genes turn on to create hydrogen and ethanol in the process of breaking down feedstocks, as well as which proteins act as catalysts during the process.

In nature these bacteria exist in complex communities, so the team is also looking at whether the communities are more effective at breaking down woody material than individual organisms. Co-lead Richard Sparling explains, “We’re looking for new bacteria, working to understand them using genomics tools, and putting them together to see how the processes improve.”

The process needs to be as productive as possible to be sustainable. Therefore, the team is also

analyzing the possibility of making more than one product from these woody feedstocks. “We take what we don’t use when extracting the biofuels,” explains co-lead David Levin, “and feed those by-products to the next level of bacteria to make bioplastic. That way we get multiple end products from the same material.”

With better understanding of the genomes of the organisms involved in the biorefining process, researchers will be able to design improved bacteria to efficiently breakdown waste products into fuel and bioplastic. Another team is exploring the economic and social implications of such research, examining topics such as attitudes toward biofuels, patenting issues as well as sustainability.

Sustainability on all levels is key to the project. Since using fuel to haul agricultural waste to a processing facility could counteract any benefits gained from turning it into biofuel or bioplastics, teams are exploring possibilities for integrating biorefineries into the agricultural landscape.

Another sustainable development possibility for the process revolves around increasing the value of marshy areas in agricultural lands. Marshy areas where cattails grow have environmental value as phosphorus and nitrogen sinks, as well as mitigating the effects of floods. If cattails could serve as a feedstock for biofuels, there may be a clear economic reason to maintain marshes instead of draining them. The results would be a healthier environment, as well as economic benefits for farmers.

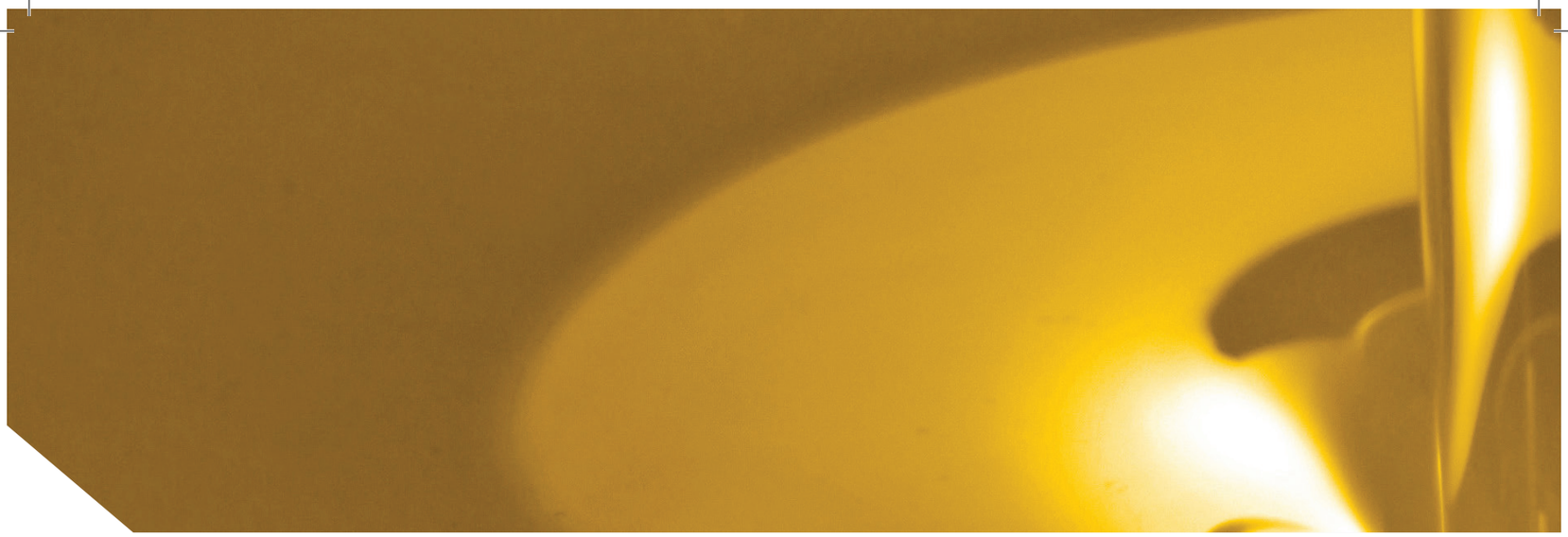
“We have added new microbes to the collection of organisms for biofuels production from lignocellulose,” says Sparling. “We can make decisions regarding which enzymes can be improved, and that is leading to better models for how the process works.”

“WE’RE LOOKING AT THE UTILITY OF MICROBES, BUT ALSO AT GAINING A GENERAL UNDERSTANDING OF HOW THEY WORK, SO WE CAN MAKE THEM EVEN MORE USEFUL.

– MGCB² Co-Lead, Richard Sparling, University of Manitoba

MGCB²

www.microbialrefinery.com



PRAIRIE GOLD: DEVELOPING INDUSTRIAL OILSEED CROPS

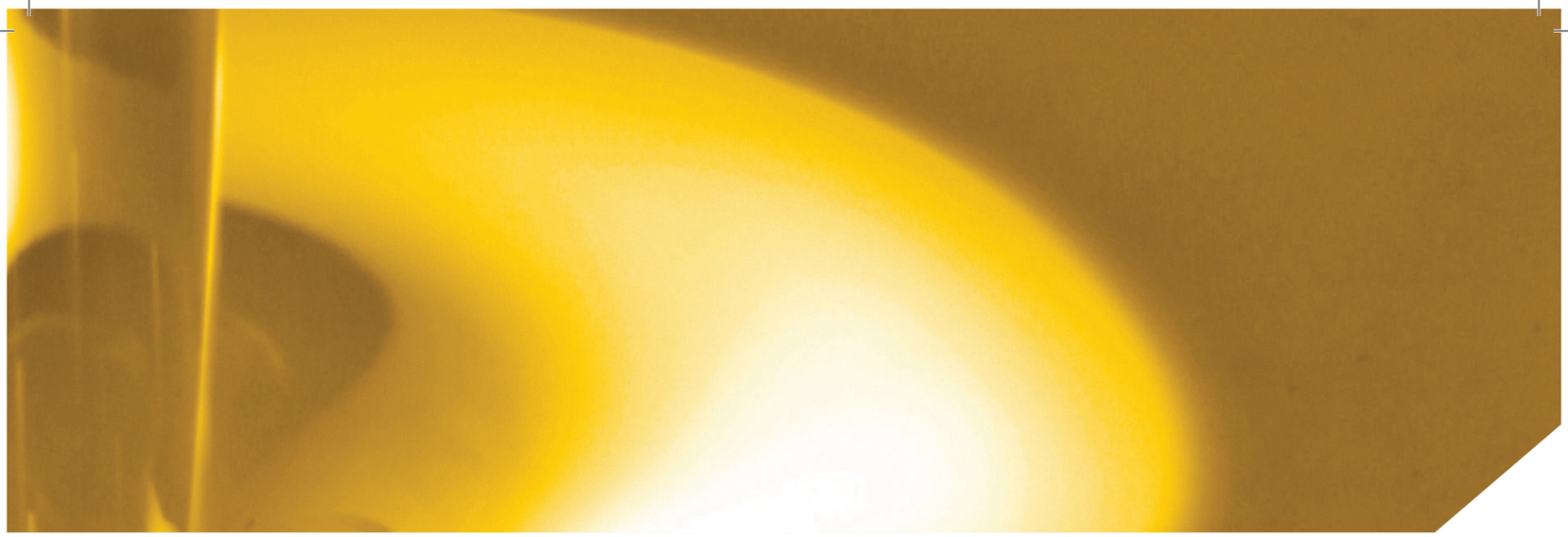
Growing plants that can replace fossil fuels has long been a goal of researchers. These renewable plant-based fuels would reduce greenhouse gas and soot emissions during combustion, while providing a continuously renewable fuel resource.

With the sequencing and further study of oil seed crops known as carinata and camelina, we are much closer to renewable biofuels —so close, in fact, that a test flight using carinata-based biojet fuel has already been successfully conducted.

Carinata, a relative of mustard, is a drought tolerant plant which can grow in marginal areas of the Prairies. The plant's ability to grow on marginal lands means that it can be produced as a feedstock for biofuel or bioproducts without taking away from food production. It is a non-edible oil that has been identified as having excellent characteristics to be processed as a biojet fuel. Camelina is also being examined to determine its potential in industrial oil applications. Both are well suited to prairie growing conditions.

The Prairie Gold project began by sequencing camelina and re-sequencing both plants to identify markers for desirable traits such as early maturation, disease resistance and oil quality, which will help streamline breeding programs.

The project involves two private companies that are developing technologies to enhance the commercialization chain of these plants, from seed development to the creation of bioproducts.



The end goal is to create a production system where farmers use high-quality seed to grow feedstocks for biofuels and bioproducts.

Carinata is further along in the development process and its production has been approved by regulators. Agrisoma Biosciences Inc. is preparing to ramp-up the crop's production, once refining infrastructure is in place. Carinata is being used as a feedstock for 100% drop-in biojet fuel, as opposed to previous biojet fuels which had to be mixed in a 50/50 blend with conventional fuel.

Linnaeus Plant Sciences Inc. is working to develop camelina into higher value products, such as hydraulic fluid, which would increase the product quality as well as the value of the crop per acre. It is also using the pipeline of genomics tools developed by Prairie Gold to enhance oil yield per acre, increase seed size, and produce higher levels of monounsaturated fatty acids needed for valuable bioproducts.

Prairie Gold is working alongside other research projects to further develop camelina and carinata. A project led by Genome Atlantic, for example, is studying different camelina traits in an effort to develop fish meal with high protein and oil-content. Fish meal and industrial bioproducts require different types of fatty acids, so while both projects will be using the same genomic data, they are developing different varieties for different purposes. Regardless of the variety developed, the message is the same: there is more gold to be grown on prairie soil!

> "CARINATA'S DEBUT AS A 100% DROP-IN BIOJET FUEL WAS ONE OF POPULAR SCIENCE'S 'BIG SCIENCE STORIES OF 2012'.
>
> – Doug Heath, Project Manager, Genome Prairie

prairiegold
www.prairiegold.ca

TUFGEN: MAKING THE MOST OF FLAX

The multi-purpose characteristics of flax make it a unique and valuable crop. The stem fibres of some cultivars are used to make linen and various fiber products. Other cultivars produce higher quality oilseeds which can be sold as agri-food products, nutraceuticals, animal feed, or processed into biodegradable products such as linoleum and paint.

The Total Utilization Flax GENomics (TUFGEN) project has sequenced the entire flax genome; it is the first plant to be sequenced exclusively by a Canadian team. With that foundation, the team launched into research aimed at developing a flax plant that contains both high-quality stem fibers and seed oil. Through these studies, the team has developed a series of genomics resources that has accelerated our understanding of flax beyond expectations.

Project Co-Leader Gordon Rowland says, "At the beginning of this project, we knew relatively little about flax. In comparative terms, what we knew at the outset was similar to a Grade One reader; but thanks to TUFGEN, we have expanded that knowledge to The Complete Works of Shakespeare."

In the past four years, the team has built the flax transcriptome database identifying genes expressed in developing seeds and stems. They have characterized the performance and composition of more than 800 flax lines in the field and acquired DNA sequence information of more than 700 of them. Project co-lead Sylvie Cloutier explains, "In most genomics projects, there is a huge emphasis on genotyping, but in TUFGEN, we also dedicated a lot of effort to phenotyping. The combination of information is extremely powerful." These resources have led to new discoveries by researchers across

Canada and around the world that are expected to greatly benefit the flax industry.

The TUFGEN team is studying gene variants to identify genes responsible for stem fiber strength, oil composition, seed size and many other characteristics. Cloutier expands: "We're trying to get to the point where we can look at the genome of a seedling and predict the characteristics of the plant that will grow." These research outcomes are passed on to plant breeders, allowing them to implement new strategies toward faster and greater breeding progress. The team is looking at the whole package: agronomics, disease, and plant and seed components for quantity and quality.

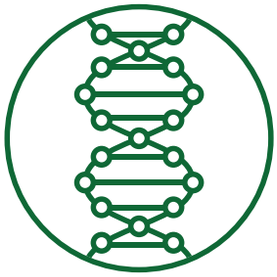
The TUFGEN team is also studying specific components in flax that may have potential commercial applications for niche markets. Flax lignans, for example, contain natural phytoestrogens, which have great potential as nutraceuticals. Studies are underway to determine their bioavailability and to estimate the extent of their variability in flax varieties. Other researchers are determining ways to create varieties with more omega-3 fatty acids and higher oil content.

TUFGEN has also increased communication among the flax research community across the country and around the world. Over the last four years, research networks have evolved, and will continue to do so. Knowledge and development of flax, thanks to this all-Canadian team, will continue to grow.

> "ADVANCEMENTS ENABLED THROUGH TUFGEN ARE SECURING CANADA'S POSITION AS A WORLD LEADER IN FLAX.
>
> – TUFGEN co-lead, Sylvie Cloutier, Agriculture and Agri-Food Canada

TUFGEN
Total Utilization Flax Genomics
www.tufgen.ca

VALGEN: CAPTURING THE VALUE OF GENOMICS RESEARCH



Genetic modification is one of the world's most polarizing issues. Europe and the Americas have taken opposing stances in the debate, and this conflict has overshadowed the entire industry.

Genomics and biotechnology are often labeled as 'good' or 'bad' and there appears to be little effort on the part of the public or mainstream media to understand the finer points of the debate.

Enter VALGEN, a collaboration of researchers trying to understand the economic, social and cultural drivers behind the movement of scientific discoveries from the laboratory to the marketplace. The team is conducting research in three areas: democratic engagement, governance and regulation, and intellectual property and technology management.

Peter Phillips, co-Leader of the project, states, "Until recently, governments have communicated with the public using processes that are democratic and not engaging, such as surveys; and processes that are engaged, but not democratic, such as expert panels. It is a challenge to find a process that is both."

One of VALGEN's goals is to understand how some types of information can capture the public eye, yet misinform overall. VALGEN researchers are also working to assist policy makers to more confidently make decisions. "The current model of policy making and risk management is high cost and only medium return. We don't want to have a system that approves something that does

damage, but neither do we want to deny approval to something that is efficacious," explains Phillips. "This is about optimizing technological use, not maximizing it." New decision making models and metrics offer hope for more effective structuring and management of regulatory systems.

Ultimately, there is a gap between scientific research and commercial use. Intellectual property tactics and corporate strategies are vital. Some strategies, such as exclusionary patenting, can restrict innovation or be ineffective. VALGEN has investigated a range of intellectual property management models and impacts, both in research and in practice.

VALGEN researchers have also created a toolbox for governance of genomics in bioproducts and crops. The project has already assisted governments and firms to choose and adopt more effective public engagement models, including those for the biofuels policy area.

The VALGEN team is heavily involved in international governance changes with potential impacts for the agriculture biotechnology community, including socioeconomic impacts and low level presence policy. The VALGEN team has also developed and will soon publish a definitive assessment of the current socio-economic impacts of biotechnology in agriculture, which is expected to become a core body of evidence that will help regulators and policy makers design policy and make decisions.

> THE CHALLENGE THE WHOLE SYSTEM FACES IS TO COMMUNICATE ACCURATE INFORMATION THAT CAN BE USED TO INFORM DECISIONS.
>
> – VALGEN co-lead, Peter Phillips, University of Saskatchewan

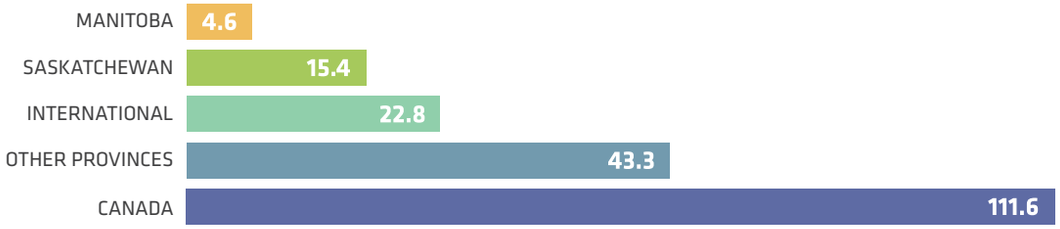
VALGEN
www.valgen.ca

FACTS AND NUMBERS

TOTAL RESEARCH ACTIVITY SUPPORTED: **$197 MILLION**

Over 13 years of operation, Genome Prairie has supported more than $197 million of research activity. These funds come from a variety of different federal, provincial, industry and international sources, including $99 million from Genome Canada. This value also encompasses the in-kind research provided by project partners across Canada and around the world.

OUR SOURCES OF FUNDING
(in millions of dollars)



TOTAL RESEARCH SPENDING IN MB AND SK: **$86 MILLION**

Of the $197 million in research activity supported, over $86 million has been invested directly in Manitoba and Saskatchewan. Prairie provinces have invested $20 million in Genome Prairie projects generating significant leverage of over four times the return on investment.

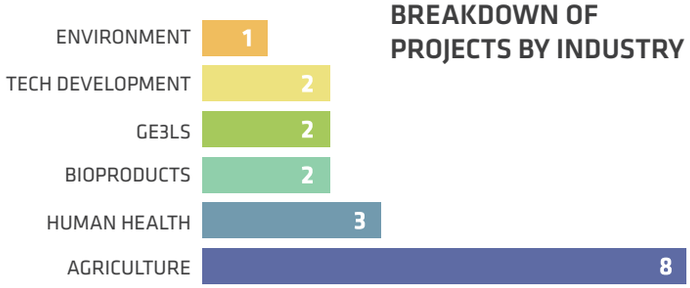
JOBS AND TRAINING

18
LARGE SCALE PROJECTS

850+
PUBLICATIONS

1,500+
FTE YEARS

BREAKDOWN OF PROJECTS BY INDUSTRY



OUR BOARD OF DIRECTORS

DR. ARNOLD NAIMARK (CHAIRMAN OF THE BOARD)
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University of Manitoba, Winnipeg

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Vice President Commercialization,
PanProvincial Vaccine Enterprise, Saskatoon

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(to June 2013)
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PATRICK PITKA
Chief Financial Officer

RENO PONTAROLLO
President & CEO

DANIEL RAMAGE
Director of Communications

MICHAEL REIMER
Director of Business Development

OLYA VRUBLEVSKY
Project Coordinator

CINDY YUNGWIRTH
Corporate Secretary and
Privacy Officer

Consolidated Financial Statements of

GENOME PRAIRIE

Year ended March 31, 2013

June 27, 2013

Independent Auditor's Report

To the Directors of Genome Prairie

We have audited the accompanying consolidated financial statements of Genome Prairie and its subsidiary, which comprise the consolidated statement of financial position as at March 31, 2013 and March 31, 2012 and April 1, 2011 and the consolidated statements of operations and changes in net assets and cash flows for the years ended March 31, 2013 and March 31, 2012, and the related notes, which comprise a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements
Management is responsible for the preparation and fair presentation of these consolidated 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 consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility
Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements 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. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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

Opinion
In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Genome Prairie and its subsidiary as at March 31, 2013 and March 31, 2012 and April 1, 2011 and the results of their operations and their cash flows for the years ended March 31, 2013 and March 31, 2012 in accordance with Canadian accounting standards for not-for-profit organizations.

PricewaterhouseCoopers LLP

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GENOME PRAIRIE

Consolidated Statement of Financial Position

	March 31, 2013	March 31, 2012	April 1, 2011
		(Restated Note 7)	
Assets			
Current Assets			
Cash and cash equivalents	$ 2,385,009	$ 1,728,694	$ 3,624,804
Investment certificate	-	$ 1,032,500	-
Accounts receivable	$ 648,967	$ 713,782	$ 147,418
GST receivable	$ 102,489	$ 65,574	$ 50,068
Project advances	$ (13,086)	$ 1,117,262	$ 158,795
Prepaid expenses	$ 5,136	$ 4,451	$ 5,660
	$ 3,128,515	$ 4,662,263	$ 3,986,745
Investment certificate	-	-	$ 1,001,430
	$ 3,128,515	$ 4,662,263	$ 4,988,175

Liabilities and Net Assets

Current Liabilities:			
Accounts payable and accrued liabilities	$ 586,311	$ 403,747	$ 1,500,697
Deferred contributions (note 5)	$ 2,276,717	$ 3,993,029	$ 3,221,991
	$ 2,863,028	$ 4,396,776	$ 4,722,688
Net assets	$ 265,487	$ 265,487	$ 265,487
	$ 3,128,515	$ 4,662,263	$ 4,988,175

See accompanying notes to consolidated financial statements.

On behalf of the Board:

Director

Director

GENOME PRAIRIE

Consolidated Statement of Operations and Changes in Net Assets

Year ended March 31, 2013, with comparative figures for 2012

		2013		2012
				(Restated Note 7)
Revenue:				
Project revenues (note 5)	$	8,154,455	$	6,312,656
Administrative support revenues (note 5)		956,611		1,221,053
Interest income		70,150		101,284
		9,181,216		7,634,993
Expenses:				
Research project expenditures		8,154,455		6,312,656
General and administrative		981,038		1,192,992
Project development and consulting costs		45,723		129,345
		9,181,216		7,634,993
Excess of revenue over expenses		–		–
Net assets, beginning of year		265,487		265,487
Net assets, end of year	$	265,487	$	265,487

See accompanying notes to consolidated financial statements.

GENOME PRAIRIE

Consolidated Statement of Cash Flows

Year ended March 31, 2013, with comparative figures for 2012

	2013	2012
		(Restated Note 7)
Cash flows from (used in):		
Operations:		
Excess of revenues over expenses	$ –	$ –
Change in non-cash operating working capital:		
Accounts receivable	64,815	(566,365)
GST receivable	(36,915)	(15,506)
Project advances	1,130,348	(958,467)
Prepaid expenses	(685)	1,209
Accounts payable and accrued liabilities	182,563	(1,096,949)
Deferred contributions	(1,716,311)	771,038
	(376,185)	(1,865,040)
Investing activities:		
Proceeds on maturity of investment certificate	1,032,500	-
Increase in investment certificate, net	-	(31,070)
Net investing activities	1,032,500	(31,070)
Increase (decrease) in cash and cash equivalents	656,315	(1,896,110)
Cash and cash equivalents, beginning of year	1,728,694	3,624,804
Cash and cash equivalents, end of year	$ 2,385,009	$ 1,728,694
Cash and cash equivalents consist of:		
Cash	1,318,861	1,728,694
Investment certificate	1,066,148	-
	$ 2,385,009	$ 1,728,694

See accompanying notes to consolidated financial statements.

1. Nature of business:

Genome Prairie (the "Corporation") was incorporated in 2000 under the *Canada 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. Approximately 65% 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, Interra 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.

Restricted investment income is recognized as revenue in the year in which the related expenses are incurred. Unrestricted investment income is recognized as revenue when earned.

(d) Financial Instruments:

Financial assets and financial liabilities are initially recognized at fair value and subsequent measurement is at amortized cost. Transaction costs are expensed as incurred.

(e) Cash and cash equivalents:

The investment certificate is a one year cashable term deposit with interest at 1.5%. In the previous year, the investment certificate was a two year fixed term deposit with interest at 3.25%.

(f) Income taxes:

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

3. Impact of the change in the basis of accounting:

Effective April 1, 2012, the Corporation has elected to adopt the Canadian accounting standards for not-for-profit organizations ("ASNPO"). These are the Corporation's first financial statements for which the Corporation has applied ASNPO. The Corporation has not utilized exemptions on the adoption of ASNPO. There were no adjustments to the statement of financial position, the statement of operations and changes in net assets or cash flows.

4. Financial instruments and risk management:

The Corporation, through its financial assets and liabilities, which consist of cash and cash equivalents, investment certificate, accounts receivable and accounts payable and accrued liabilities, has exposure to the following risks from its use of financial instruments:

Credit risk

The Corporation's financial assets including accounts receivable are not exposed to significant credit risk.

Interest rate risk

The Corporation's financial assets have limited exposure to interest rate risk due to the short-term maturity. The investment certificate has a maturity of one year with a fixed rate of interest.

Other

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.

5. 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 are as follows:

	2013	2012
Opening deferred contributions for expenses of future periods	$ 3,993,029	$ 3,221,991
Contributions during the year:		
Genome Canada	3,269,573	5,393,726
Province of Saskatchewan	1,358,868	925,064
Enterprise Saskatchewan	1,634,632	240,000
Western Economic Diversification	770,775	900,808
Project Expense Recoveries	184,612	146,063
Workshops and Other	13,168	14,739
Manitoba Flax Growers Association Inc.	25,000	25,000
Cameco Corporation	0	75,000
Saskatchewan Flax Development Commission	25,000	25,000
Flax Canada	25,000	25,000
National Research Council -IRAP	0	160,000
Government of Canada - Service Canada	4,821	12,503
Ag-West Bio Inc.	72,533	126,000
Canada Revenue Agency	10,772	235,844
	7,394,754	8,304,747
Total contributions available	11,387,783	11,526,738
Less amounts recognized as project revenues	(8,154,455)	(6,312,656)
Less amounts recognized as administrative support revenues	(956,611)	(1,221,053)
Closing deferred contributions for expenses of future periods	$ 2,276,717	$ 3,993,029

6. Commitments:

Project Commitments:

The Corporation signed a new funding agreement with Genome Canada on March 27, 2013 effective April 1, 2013. In addition, the Corporation received a Notice of Award on April 10, 2013 covering administrative support funding of $734,800 for the year ending March 31, 2014. As specified in the agreement, Genome Canada may provide transition 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" as part of the transition budget shall not be reimbursable in the event such commitments from other parties have not been secured. Genome Canada may then terminate the agreement or funding for a particular component.

Lease Commitments:

The Corporation has entered into a sub-lease agreement for office space expiring on March 31, 2016, unless terminated prior to that date. The length of notice of termination required is three months. The approximate annual rental is $60,000.

7. Restatement of comparative figures:

The figures for the year ended March 31, 2012 have been restated to take into account actual project expenses that were $370,274 less than the estimated project expenses for that year. This had the effect of increasing project advances and deferred contributions and decreasing project revenues recognized by the same amount.

The investment certificate as of April 1, 2011 has been reclassified as a non-current asset to reflect its maturity date of more than one year.

GenomePrairie

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