Our Mission
Genome Alberta supports genomics solutions for end-user needs through excellent science, technology and application development, collaborations and partnerships and fostering and supporting genomics literacy.

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The year at-a-glance

150 For Canada’s 150th birthday, a team of researchers wanted to give something back by celebrating the country’s national symbol and mapping the genome of the Canadian beaver. The sequencing was carried out by The Centre for Applied Genomics at Toronto’s Hospital for Sick Children in partnership with the Ontario Institute for Cancer Research, the Royal Ontario Museum, the University of Toronto and the Toronto Zoo. The Centre for Applied Genomics is one of 10 genomics technology platforms across Canada that Genome Canada supports.

31 A total of 31 print ads will be published in Alberta weekly newspapers to remind Albertans to come out and support their local science fairs and to talk to the young scientists as they show off their projects.

11.5M The total amount of contributions received during the year is $11.5 million, including $4.9 million (43%) from Genome Canada, $4 million from the Government of Alberta and $2.2 million from Alberta Innovates (19%).

3.4M Genome Alberta has also enjoyed success in Genome Canada’s Genomic Application Partnership Program, where we were able to secure a $3.4 Million investment for a project entitled Development of Genomic Crossbred Estimate Breeding Values (GCEBV) to maximize profitability for Canadian pork producers.
Managing Microbial Corrosion in Canadian Offshore and Onshore Oil Production — a four-year research project that began in January 2017 — has received $7.8 million in funding from the Genome Canada 2015 Large-Scale Applied Research Project Competition (LSARP). It is one of 13 applied research projects harnessing genomics to address challenges in Canada’s natural resources and environment sectors announced in December, 2016 and $78 million from co-funders, including provinces, international organizations and private partners.

Data collection on two traits of interest, feed efficiency (FE) and methane emissions (ME), has ramped up in this first year. Working closely with a commercial dairy farm in Alberta, feed intake data is being collected on over 1,000 dairy animals, which will be integrated with data from over 9,000 cows from research herds in Canada and internationally. FE, ME and milk recording data will flow into a secure database developed by the project for the generation of genetic evaluations. This will enable genomic selection for animals that produce more milk with fewer inputs while also producing less methane, a powerful greenhouse gas (GHG).

Nationally thirteen projects were approved for a total value of $110 million. Genome Alberta was delighted to lead four large scale projects for a total value of $35.8 Million. Three out of these four projects were national partnerships.

In December 2016, $11.5 million was granted to a University of Alberta-led project investigating chronic wasting disease (CWD) and how it affects deer, elk, moose, and caribou. CWD is moving into Alberta from parts of Saskatchewan, where a quarter of the deer herd may already be infected with the fatal neurological syndrome that’s linked to prions, a misfolded protein that destroys the animal’s brain.

Four projects led by Genome Alberta secured 31% of the funding available in the Large Scale Applied Research Project in Natural Resources and the Environment and this success will increase research capabilities in the province and have attracted significant industry interest.
Message from the Chair

Last year I was writing to highlight Genome Alberta’s 10th anniversary and the glowing report we received from an independent expert panel. This year I am writing to reflect on a 2016-2017 year that was the most successful one for us in Canada-wide funding competitions. It was also a year that saw some changes in the provincial research landscape.

In May 2016 the Alberta Research and Innovation Amendment Act 2016 received Royal Assent. The outcome of this amendment has been the dissolution of the 4 Alberta Innovate corporations into a single entity — Alberta Innovates — which came into effect in November. The Government has acted to strengthen Alberta’s Innovation and Research ecosystem and Genome Alberta looks forward to continuing to work collaboratively with our partners to focus on provincial priorities.

Genome Alberta’s staff has been working hard to enhance the translation and commercialization of project by assisting researchers in capitalizing on their project results. New partnerships were established with Alberta-based technology transfer offices, such as TEC Edmonton, Innovate Calgary and the University-Industry Liaison Office at the University of Lethbridge. These partnerships will drive the innovation process to ensure that the social and economic benefits of our funded projects are realized for the province by facilitating, translating and commercializing new technologies.

As we look forward to the outcomes of our current research and look ahead to new funding competitions I would like to thank Genome Alberta’s staff for their work in making this past year a successful one and wish everyone the best of success in the year to come. Finally I would also like to thank everyone on the Genome Alberta Board of Directors. They are all volunteers and give their time freely to help raise the profile and value of genomics and to ensure that Genome Alberta is an important part of that value.

Andrew Stephens
Chair, Genome Alberta
Message from the CEO

Adaptation. Mitigation. Diversification. Remember those words because they were key to Genome Alberta’s success in the last fiscal year and for what lies ahead.

Our success this year was largely due to projects that will find new ways for forests to adapt to climate change, that will help mitigate the effects of oil spills in the arctic, and will support Alberta’s goal of diversifying the economy. Four projects led by Genome Alberta secured 31% of the funding available in the Large Scale Applied Research Project in Natural Resources and the Environment and this success will increase research capabilities in the province and have attracted significant industry interest. The research projects are led or co-led out of academic institutions in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, and Newfoundland and Labrador. I would like to congratulate all the researchers who were successful in the competition and thank everyone who worked to make it possible.

In August I was invited to participate in the federal government’s Innovation Review hosted by University of Calgary President Elizabeth Cannon. The feedback from this discussion will become part of the cross-Canada consultation process being conducted and compiled by Innovation, Science and Economic Development Canada at the request of Minister Navdeep Bains. I would like to thank Genome Alberta ex-officio Board member David Migadel for ensuring our involvement in this important exercise.

One area of research connected to the health sector that has become important to us in this fiscal year is antimicrobial resistance, or AMR. In February 2017, Genome Alberta and the University of Calgary co-hosted a national workshop on AMR research strategy themes. We had an excellent turnout and we will be working with AMR researchers and institutions to develop a new proposal to the National Centre of Excellence process under NSERC. This initiative would be country-wide in scope and include academics at a number of universities, researchers at federal government labs, and several industry partners. AMR is a global problem and I anticipate playing a continuing role in developing Canada’s involvement in meeting the challenge.

We could not do this alone. Alberta Economic Development and Trade, Alberta Agriculture and Forestry, the Alberta Prion Research Institute, Alberta Innovates, the University of Calgary, and the University of Alberta were all part of our successful journey during 2016-2017. We look forward to their ongoing support, and to developing new partnerships in 2017-2018.

Dr. David Bailey
President & CEO, Genome Alberta
Mitigation
Message from the CSO

From a scientific perspective this past fiscal year has been the most successful year to date for Genome Alberta. We were able to attract significant partner funding to advance Alberta’s research and sector priorities and despite Alberta’s fiscal challenge we continue to enjoy strong support from Alberta Economic Development and Trade, Alberta Innovates, and Alberta Livestock and Meat Agency.

One of the great virtues of the Genomic Enterprise, which comprises Genome Canada and its regional Genome Centres, is that it promotes collaboration nationally, while taking advantage of regional strengths and priorities. We saw proof that this model works in the results of the 2015 Large-Scale Applied Research Project (LSARP) Genome Canada Competition in Natural Resources and Environment. Nationally thirteen projects were approved for a total value of $110 Million. Genome Alberta was delighted to lead four large scale projects for a total value of $35.8 Million. Three out of these four projects were national partnerships. The first funded project entitled “Managing Microbial Corrosion in Canadian Offshore & Onshore Oil Production Operations” is a global partnership anchored by Alberta and Newfoundland & Labrador investigators. A better understanding of such corrosion is needed in the light of the desire to continue to improve the safety record of transmission pipelines and to better manage costs associated with the corrosion of major energy infrastructure.

The second Alberta-led project entitled “GENICE: Microbial Genomics for Oil Spill Preparedness In Canada’s Arctic Marine Environment” took advantage of University of Manitoba’s Churchill Marine Observatory which will be a globally unique, highly innovative, multidisciplinary research facility located in Churchill, Manitoba, adjacent to Canada’s only Arctic deep-water port. The third Alberta-led Project “Resilient Forests : Climate, Pests & Policy – Genomic Application” partnered with British Columbia forestry investigators to use genomics to advance forestry breeding programs in order to develop forests that will be better adapted to our changing climate.

The fourth Alberta-led Project “Systems Biology and Molecular Ecology of Chronic Wasting Disease” focussed on the emerging threat of CWD in Western Canada’s cervid population and the impact that this has on Canada’s aboriginal peoples as well as hunters and farmers. Like mad cow disease, CWD is a prion disease and the foundational capacity for this research was established through a long standing commitment from the Alberta Government to fund the Alberta Prion Research Institute.
Genome Alberta has also enjoyed success in Genome Canada’s Genomic Application Partnership program, where we were able to secure a 3.4 Million investment for a project entitled “Development of Genomic Crossbred Estimate Breeding Values (GCEBV) to maximize profitability for Canadian pork producers”.

As I alluded to in last year’s update, 2017’s focus is on Genomics and Precision Health. In January 2017, Genome Canada launched a dedicated LSARP Competition in this area. Leading up to this launch Genome Alberta worked closely with Alberta Innovates on a number of initiatives. We engaged in a series of stakeholder consultations that culminated in the launch of the Alberta Precision Health Initiative Development Grant Competition. The funding, provided for by Alberta Innovates, will facilitate the coalescence of multi-sectoral teams, catalyze their activities in precision health, and enhance Alberta’s competitiveness in upcoming national and international precision health funding opportunities.

In addition, Genome Alberta has been working closely with Alberta Health Services to ensure that any proposed efforts will have the potential to be implemented in the clinic. This is a ambitious exercise, but one that Genome Alberta is keen to be a part of. One year from now I will be reporting back on advances that Genome Alberta has made in securing partner funding for Precision Health and the potential this will have to change patient care. As Inventor Daniel Hillis said “Your genome knows much more about your medical history than you do”.

I guess we are about to find out…

Dr. Gijs van Rooijen
Chief Scientific Officer, Genome Alberta
From the Communications Desk

Nothing makes a job in communications easier than having some good success stories to tell.

When the official announcement of the 2015 LSARP results was made in December of 2016, the coverage of our 4 Alberta-led projects was almost as successful as the applicants were. The Chronic Wasting Disease project based at the University of Alberta was covered by the Globe and Mail, our Chief Scientific Officer was interviewed for radio, the microbial corrosion project received good pick-up from industry publications, Casey Hubert’s work that is part of the GENICE project was included in a CNBC news feature, and CKUA aired a series of stories covering many aspects of the new projects with special emphasis on the role of metabolomics.

Genome Alberta has been sponsoring Alberta Science Fairs since our inception in 2006 and we are working to increase that support. With the tight Alberta economy, regional science fairs are finding it harder to find sponsorship dollars to run their events. We have made plans in our upcoming budget year to increase our funding commitment to both the regional science fair administration support and to the cash prizes for students with winning genomics entries. During this fiscal year we helped raise the profile of the Science Fairs by running print advertisement in weekly newspapers around the province. A total of 31 print ads will be published throughout this fiscal year and into the next to remind Albertans to support their local science fairs and talk to the young scientists as they show off their projects.

iGEM or the International Genetically Engineered Machine Competition could be described as taking science fairs to a whole new level for university students. Teams use synthetic biology BioBricks which are interchangeable parts to build biological systems in living cells. Each team spends the summer months designing and building systems using these standard biological parts to solve real-world problems. These may include issues in the energy, agriculture, medical or environmental sectors. Students brainstorm their own ideas and manage the projects themselves. This year we sponsored 2 teams, one from the University of Lethbridge and one from the University of Calgary. At the iGEM Jamboree in Boston, the Lethbridge team won a gold medal and the Calgary team brought home a gold medal and a special prize for the Best Integrated Human Practices. Many of the iGEM teams go on to commercialize their projects or their findings and this year we tracked down some of the past competitors and shared six of their success stories with Alberta policy makers.
We were fortunate enough to have a Members’ Statement read in the Alberta Legislature on November 23, 2016 by MLA Shaye Anderson (Leduc – Beaumont). Genome Alberta’s CEO Dr. David Bailey and Genome Alberta funded researcher Dr. John Basarab were introduced prior to the statement being read.

Genome Alberta is engaged in sponsorships that help raise the profile of us as an organization and raise awareness of the importance of science literacy. Calgary-based Beakerhead is one of the organizations we support through its science communication program. Each September, Beakerhead Week showcases the fusion of science and art with installations throughout the city.

In addition to our support of iGEM and Alberta Youth Science fairs, we also support a third youth-focussed project, called BioTreks.

The BioTreks journal gives students an opportunity to share their unique high school laboratory experiences with international counterparts while engaging in both sides of the peer review process. Participants present and review their scientific manuscripts at an online conference prior to publication in the online journal. The inaugural May 2016 BioTreks conference was a great success with more than eighty students from eight schools in Alberta and the US submitting ten papers and seven graphic designs for comment and review by their peers. We look forward to a continued relationship with the Alberta-based group and the other major event sponsor, Ars Biotechnica, Inc.

Genome Alberta’s accomplishments in 2016-2017 ensured that Communications had lots to do and say about the organization, so a tip of the hat to everyone for giving us the stories to tell!

**Mike Spear**  
**Director, Corporate Communications**
Breaking Down Corrosion

Genome scientists at four Canadian universities are collaborating with international colleagues and industry to harness genomics in breaking down the microbial corrosion that can damage pipelines. As long as oil and gas have been transported by pipeline, ruptures have produced both environmental and economic costs. And the main cause of pipeline incidents is metal loss — or corrosion — which causes roughly 35 per cent of pipeline leaks and costs $2.5 trillion around the world annually.

While that corrosion is caused by a range of internal and external factors, microbiologically influenced corrosion (MIC) is to blame for 20 per cent of it. Genomic science is adding an investigative layer to industry efforts to combat microbial corrosion by enabling a more holistic examination of MIC processes across disciplines, leading to better understanding, mitigation and management of the process. Leading the project are: Lisa Gieg, an associate professor in the Department of Biological Sciences at the University of Calgary; John Wolodko, an associate professor and Alberta Innovates Strategic Chair in Bio and Industrial Materials at the University of Alberta; and Faisal Khan, a professor and the Vale Research Chair of Process Safety and Risk Engineering at Memorial University.

The leaders and their interdisciplinary teams will be able to break down which degradation trends are associated with certain microbes and particular chemistries that produce corrosion, simply allowing industry end-users of the technology to better predict where microbial corrosion will strike. While pipeline corrosion will be a major focus, the research will also look at all points of contact between oil and steel in extraction, production and processing to help make the industry safer. The project is one of many funded by Genome Canada that meets our GE3LS research criteria, encompassing the environmental, ethical, legal and social aspects of genomics. GE3LS research investigates questions at the intersection of genomics and society to avoid unintended consequences, cultivate success, and contribute to Canada’s leadership in the 21st century global bioeconomy. There are three main research components to the GE3LS aspect of this project: the study of the prevalence of MIC in Canada and abroad; the multi-disciplinary nature of this MIC research; and the translation and adoption of new knowledge and technologies in the oil and gas sector.

In addition to better understanding how knowledge from this research can be translated to industry, the project will demonstrate this translation. Key outcomes will be translated into recommended guideline and best practice documents for use by the Canadian and global oil & gas industry.

Ongoing collaboration between researchers and industry within the project will help facilitate the translation of our research outcomes to actual microbiologically-influenced corrosion management practices in oil and gas operations.

Lisa Gieg, Associate Professor, University of Calgary Project Lead
Lisa Gieg, associate professor in the Department of Biological Sciences at the University of Calgary.

Diversification
Highlights from our Ag Research Initiatives

It has been a busy and productive year for our pig, beef cattle, and dairy cow projects with plenty of collecting, generating and disseminating.

**Pigs**
Swine project researchers from the Universities of Alberta, Saskatchewan, Guelph, Iowa State and the French National Institute for Agricultural Research — INRA, together with their collaborators across the globe, have had a busy year conducting survey development, data collection, and analysis activities, while focussing on broadcasting information to the research and end user communities. Outcomes from this highly collaborative research environment has peaked interest from the scientific community and livestock industry, leading to new research collaborations valued at over $1.85 million.

**Beef Cattle**
On-farm phenotyping activities continued this year with data destined for use in validating prediction models. Using results obtained on an individual animal’s parentage, genomic breed composition and a ‘vigour score’, these outcomes have been translated into a laboratory service called “EnVigour HX™”. This service has been commercialized and is currently available through project partner Delta Genomics. Progress towards the generation of growth and efficiency indices continues, with preliminary results expected to be delivered to industry clients by the end of next quarter.

**Dairy Cattle**
Data collection on two traits of interest, feed efficiency (FE) and methane emissions (ME), has ramped up in this first year. Working closely with a commercial dairy farm in Alberta, feed intake data is being collected on over 1,000 dairy animals, which will be integrated with data from over 9,000 cows from research herds in Canada and internationally. FE, ME and milk recording data will flow into a secure database developed by the project for the generation of genetic evaluations. This will enable genomic selection for animals that produce more milk with fewer inputs while also producing less methane, a powerful greenhouse gas (GHG).

We provide monthly updates on the work of our agriculture research teams at GenomeAlberta.ca/livestock.
Partnerships
Chronic Wasting Disease

One of the projects that we were pleased to announce in December 2016 was $11.5 million for a University of Alberta-led project investigating chronic wasting disease (CWD) and how it affects deer, elk, moose, and caribou. CWD is moving into Alberta from parts of Saskatchewan, where a quarter of the deer herd may already be infected with the fatal neurological syndrome that’s linked to prions, a misfolded protein that destroys the animal’s brain. CWD was first reported fifty years ago in the state of Colorado. Mule deer stumbled out of the forest behaving badly and drooling like zombies. It’s now an international problem with infected reindeer recently discovered in Norway. University of Alberta biologist Debbie McKenzie and her colleague David Wishart, the director of the Metabolomic Sensors program at the National Institute for Nanotechnology at the University of Alberta, are leading one of the biggest teams in the world investigating this mysterious disease.

Upon receiving the grant, the research group immediately began collecting deer and elk samples. “Part of our proposal is to sequence the mule deer genome,” Dr. McKenzie said. “We’re working on purifying mule deer DNA,” in January, “so it will be ready for sequence analysis.”

Dr. McKenzie says the team is also “working out the best way to analyze the environmental samples.” Biologist Dave Coltman, for instance, “is doing the PRNP (PRrioN Protein) gene sequencing and gearing up to go full blast.”

Also in January, lab manager Cathy Cullingham joined the project. “I have chronic wasting disease experience,” says Dr. Cullingham, “working on population genetics of mule deer and white tale deer in Alberta and Saskatchewan, a couple years ago.”

Another team member Camilo Duque Velasquez, a PhD candidate at the University of Alberta, began his study on how CWD strains evolve and interact with the genetics of the infected animals. It’s an important question, he says, “given that cervids are a food source for humans and a risk.” To learn how the disease has progressed over the last fifty years, “we are monitoring and taking samples from different times.” The research objective is to make comparisons, “and see how the agent is changing over time.” “It’s interesting that chronic wasting disease is the back half of mad cow disease,” says Ellen Goddard, an economist in the faculty of Agricultural Life & Environmental Sciences at the University of Alberta. Dr. Goddard and her colleagues have been interested in the social science aspects of chronic wasting disease as well as BSE. Joining the CWD project “allowed us to think about new technologies and ways of tracking and doing surveillance.” While science research is exciting, says Dr. Goddard, it’s important to begin to engage “people in discussions — looking at adoption of the science — but also looking at how they’re likely to behave.”

“Who is going to adopt this new technology? Is it going to help manage the disease? Are people — the public, hunters, people in our First Nations community — going to work with the system, so we can actually monitor the spread of the disease better and potentially cut it off?”

Ellen Goddard, Faculty of Agricultural Life & Environmental Sciences at the University of Alberta.
**Genome Alberta Active Projects**

**as of March 31st, 2017 (lead or co-lead)**

- PACE - ‘Omics: Personalized, Accessible, Cost-Effective applications of ‘Omics technologies
- Reducing stroke burden with hospital-ready biomarker test for rapid TIA triage
- Enhanced CARE for RARE Genetic Diseases in Canada
- PEGASUS: PErsonalized Genomics for prenatal Aneuploidy Screening USing maternal blood
- GE3LS network in genomics and personalized health
- Sustaining and securing Canada’s honey bees using ‘omic tools
- Modeling and Therapeutic Targeting of the Clinical and Genetic Diversity of Glioblastoma
- Improving Canadian pork industry profits and export potential by developing genomic tools to enhance health, performance and disease resilience in wean to finish pigs
- Genomic approaches to the control of Bovine Respiratory Disease Complex
- Establishment of a reference genomics database for *Mycobacterium bovis* and *Brucella abortus* in Wood Buffalo National Park by whole genome sequencing and its use for analysis of local transmission patterns of bovine tuberculosis and brucellosis in this ecosystem
- Application of Genomics for Increasing Seed Oil Content in Soybean
- Establishing a Metabolomics Technology Demonstration Centre
- The Metabolomics Innovation Centre – Technology Development
- Increasing feed efficiency and reducing methane emissions through genomics: a new promising goal for the Canadian Dairy Industry
- Application of Genomics to Improve Disease Resiliency and Sustainability in Pork Production
- Development and deployment of MBVs/gEPDs for feed efficiency and carcass traits that perform in commercial beef cattle
- Resilient Forests (RES-FOR): Climate, pest and policy – genomic applications
- Systems biology and molecular ecology of Chronic Wasting Disease
- GENICE: Microbial genomics for oil spill preparedness in Canada’s Artic marine environment
- Managing microbial corrosion in Canadian offshore and onshore oil production operations
- Spruce-Up: Advanced spruce genomic for productive and resilient forests
- CoADAPTREE: Healthy trees for new climates
- Microbial genomics for derisking offshore oil and gas exploration in Nova Scotia
Collaboration
Financial Report 2017

Project Expenses

The direct project expenses for the year totaled $6 million. Project expenses have increased by $1.5 million compared to the previous year, due to the launch of LSARP 2015 and increased expenses on LSARP 2014 projects. Project expenses are expected to increase next year as LSARP 2015 projects gear up.

A copy of our audited financial statement is available on request.
Revenues
For the fiscal year ended March 31, 2017, GAB’s revenue totaled $8.1 million, funded by grants received from Genome Canada ($4.7 million), Government of Alberta ($2.4 million), Alberta Innovates ($0.6 million), and other sources ($0.5 million).

$8.1 million

Expenses
Total corporate expenses, excluding project expenses, for fiscal year ended March 31, 2017 is $2.1 million, which is $0.5 million under budget for the corresponding year. The larger portion this variance relates to savings on general and administration expenses.

$2.1 million
Getting Energy on the Genomic Map – a Timeline to Success

Genome Alberta Created
6th regional Genome centre in the Canadian Genomics Enterprise

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

Workshops
Uncovering the Microbial Diversity of the Alberta Oil Sands through Metagenomics

Competition
Applied Genomics Research in Bioproducts or Crops (ABC)

Project
Metagenomics for Greener Production and Extraction of Hydrocarbon Energy ($11.9M)

ISMOS3
UCalgary hosts the 3rd International Symposium on Applied Microbiology and Molecular Biology in Oil Systems

Workshops
Genome Alberta and PTAC host: The Impact of Genomics Sciences on the Oil and Gas Industry - Three Part Series

Building Capacity
Genome Alberta informs the recruitment of two strategic chairs in Energy Bioengineering and Geomicrobiology

PTAC
Genome Alberta signs memorandum of understanding with the Petroleum Technology Alliance of Canada

GENICE: Microbial Genomics for Oil Spill Preparedness in Canada’s Arctic Marine Environment ($10.62M)

Project
Managing Microbial Corrosion in Canadian Offshore and Onshore Oil Production ($7.8M)

Workshops
Applied Genomics in Energy for Collaboration government, academic, and industry stakeholders from across Canada

Sector Strategy
Genome Alberta leads steering committee on development of: Advancing Canada's Energy and Mining Sector Through State-of-the-Art Genomics Applications

Competition
2015 Large Scale Applied Research Project: Natural Resources and the Environment
Genomics Awareness Surveys

The economy dominated the public agenda in Alberta during the two surveys. Concerns over jobs (48%), the economy generally (54% unprompted mentions), and the price of oil. Concerns over new carbon taxes escalated from 24% in June to 41% in December 2016. Healthcare, typically a top 2 or 3 issue, was mentioned by 22%, almost as much as pipelines (20%) and double that of diversification.

Genome Alberta is conducting a series of public opinion surveys to gain insight into attitudes about genomics and related research. The first two were conducted in the spring and winter 2016-2017 fiscal year.

1/3 of Albertans are somewhat or very familiar with terms associated with genomics, including biotechnology (33%) and personalized medicine (32%). Overall awareness of personalized medicine and Genome Alberta increased slightly from June to December 2016. Awareness of Alberta Innovates (60%) remained higher than the level for Genome Alberta (47% familiar to some degree).

47% of Albertans are somewhat or very familiar with terms associated with genomics, including biotechnology (33%) and personalized medicine (32%). Overall awareness of personalized medicine and Genome Alberta increased slightly from June to December 2016. Awareness of Alberta Innovates (60%) remained higher than the level for Genome Alberta (47% familiar to some degree).

Awareness of Genome Alberta rose slightly to 47% in the second survey. Specific recall of terms associated with genomics rose from the first to the second survey.

68% of those Albertans who were familiar with the term genomics thought it would have a positive impact on them personally which was up from 60% in June.

54% The perceived impact of genomics on Alberta’s economy is not clearly established in the publics’ mind and remained consistent over the 2 reporting periods. Just over half of Albertans thought genomics could help diversify Alberta’s economy or lead to innovations in the future, and just under half thought genomics would play an important role in Alberta’s future.

62% The impact of genomics on agriculture and food also raises concerns (62% are concerned about genetic modifications of food and animals), but on the whole Albertans believe advances in biotechnology will have a big impact in Alberta (66%, up from 62% in June).

71% of Albertans think innovations in genomics will lead to advances in medicine, up from 67% in June. A majority of Albertans (62%) believe genomics will lead to improvements in quality of life, up from 58% in June.

The surveys were conducted in June and December of 2016 by Social Media ROI. The margin of error for a random digital sample of the survey size 757-762 is +/- 3.6% at a 95% confidence level (19 times out of 20).
For Canada’s 150th birthday, a team of researchers wanted to give something back by celebrating the country’s national symbol and mapping the genome of the Canadian beaver. The sequencing was carried out by The Centre for Applied Genomics at Toronto’s Hospital for Sick Children in partnership with the Ontario Institute for Cancer Research, the Royal Ontario Museum, the University of Toronto and the Toronto Zoo. The Centre for Applied Genomics is one of 10 genomics technology platforms across Canada that Genome Canada supports. Another one of those platforms is The Metabolomics Innovation Centre established in Edmonton by David Wishart.
Genome Alberta
Board of Directors as of March 31st, 2017
Andrew Stephens (Chair)
Dr. Randy Goebel
Rod Merryweather
Dr. Ed McCauley
Dr. Stan Blade
Dr. Stephen Morgan Jones
Barry D. Mehr
Susan Elliott
Dr. Lisa Crossley
Dr. Erasmus Okine

Corporate Counsel
Robert J. Froehlich
Norton Rose Canada LLP

Board Secretary
Shari Pusch
CAS Corporate Governance Services Inc.

Ex-Officio Board Members and Observers
Dr. Pamela Valentine
Dr. Marc LePage
Dr. Surindar Singh
David Migadel
Dr. David Bailey
Dr. Gijs van Rooijen
John Brown
Geoff Pradella

Genome Alberta
Suite 200, 3512-33 Street NW
Calgary, Alberta, Canada T2L 2A6
Telephone (403) 210-5275
Fax: (403) 503-5225
Email: info@genomealberta.ca