GenomeQuébec

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Annual Report

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ABOUT GÉNOME QUÉBEC

MISSION Génome Québec's mission is to catalyze the development and excellence of genomics research and promote its integration and democratization. It is a pillar of the Québec bioeconomy and contributes to Québec's influence and its social and sustainable development.

VISION Genomics-driven innovations improve health care service delivery, support agrifood, environmental and forest management practices and enhance public policies.

MESSAGE FROM THE CHAIR OF THE BOARD

Recent years have been marked by major investments and remarkable advances in genomics, particularly in the area of human health. These important breakthroughs, however, are causing a major shift in our way of doing things and are changing current practices. How can we ensure the successful adoption of this new disruptive technology by end users? How can we integrate it effectively into medical practice? These are the challenges Québec now faces.

If we turn our attention to international trends, we note that the most successful countries are the ones that have invested massively in national strategies promoting the integration of genomics into clinical practice. These strategies, which reflect strong political leadership at the highest level, are implemented in collaboration with health care policymakers. The United Kingdom, France, Denmark and the United States are examples of countries that have incorporated genomics into a national strategy for their health care systems. These are models that Québec can draw on to fully harness the potential of genomics by ensuring its integration into human health.

In addition to challenges associated with medical practice and big data management, these national strategies also focus heavily on public education and consultation. The adoption of genomics by the public is a prerequisite to its success: without citizen support, society will fail to reap the many benefits generated by investments in genomics.

Our ultimate aim is to provide end users, policymakers and citizens, training and information tools adapted to their reality and level of understanding.

Génome Québec has always recognized the importance of reaching out and informing its various target audience groups. We are convinced that the democratization of science, the training of young talent and the integration of genomics are important factors that can drive the economic development of Québec and its global influence. Against this backdrop, education, regulation and social acceptance are at the core of our strategy for the next five years.

To reach our goal, we will need to develop segmented strategies for the various audiences we wish to address. These include health professionals to facilitate the integration of genomics into the clinical setting, high school students to stimulate their interest in science and in scientific careers, and the general public to promote well-informed choices and decisions.

Our ultimate aim is to provide end users, policymakers and citizens, training and information tools adapted to their reality and level of understanding. This public outreach strategy, initially focused on human health, will subsequently be extended to other strategic sectors, such as agrifood, forestry and the environment.

Let us not forget that we live at a time when many sensitive issues are being debated on the public forum. If we wish to avoid a hold being placed on scientific progress, while ensuring its safe and effective oversight, we must demonstrate leadership and encourage initiatives on public education and acceptance. This is why we have chosen to focus on citizen participation.

To seize future opportunities, we must continue to bank on scientific excellence and on a cutting-edge service offering. Genomics is no longer just a pipe dream; it now generates real deliverables and a growing number of solutions with major economic potential.

In closing, I would be remiss not to mention the exceptional work of our Board of Directors and our President and CEO. Through their extensive experience and expertise, they are making an outstanding contribution to a strategic sector of importance for the economic growth of Québec and the quality of life of its citizens.

Martin Godbout

MESSAGE FROM THE PRESIDENT AND CEO

When Québec issued its life science strategy and its research and innovation strategy, it made very clear its commitment to focus on the potential and benefits of these niches of excellence as drivers of its economy. Always attuned to major global trends in the area of genomics, Génome Québec quickly understood the place that this disruptive technology should occupy on the Québec stage. Backed by a world-class pool of expertise, well established in many key sectors of economic development, genomics is poised to play a pivotal role and help propel Québec among the world's most innovative societies.

Ambitious and designed to capitalize on our achievements and leverage the massive investments of recent years, the plan reflects the general opinion of members of the scientific community and partners.

To attain this major objective, Québec first needed to adopt a vision for the development and deployment of genomics. In 2017-2018, Génome Québec was hard at work doing just that when it produced its five-year plan spanning from 2018 to 2023. Ambitious and designed to capitalize on our achievements and leverage the massive investments of recent years, the plan reflects the general opinion of members of the scientific community and partners, who were surveyed during a major consultation in summer and fall 2017. From this consultation emerged a series of observations that structured our plan along four strategic objectives:

- **Support for genomics research**
  Ensure the development of research excellence in genomics by funding large-scale projects relevant to Québec's priority sectors and by stimulating partnerships with end users.
- **Integration and use of Big Data in genomics**
  Make genomics a pillar of the Québec strategy on deep learning and artificial intelligence and ensure access to quality data.
- **Delivery of a world-class multi-sector offering of technological services**
  Maximize the scientific benefits of the technology platforms by ensuring their quality and accessibility
- **Education and social acceptance**
  Make genomics work for citizens, industry and society.

Three overarching objectives will also be consistently guiding our actions as we roll out our bold plan. These involve providing an optimal framework on risk management and sound governance, recognizing and retaining talent, and lastly, ensuring our influence and securing international collaborations.

In this plan, Génome Québec proposes a series of initiatives whose ultimate aim is to create an optimal and sustainable environment conducive to the development of genomics. To do so, we will remain abreast of high-potential scientific areas, such as synthetic biology and microbiomes.

Lastly, we plan on contributing to the democratization of science so that citizens, industry and society at large may take advantage of the benefits generated by the investments made over the last two decades.

In this respect, we have planned a full program of outreach, training and social acceptance activities this year. We will be reaching out to members of the general public to gather and analyze their views on genomics in order to establish an effective, relevant public education strategy.

In conclusion, I would like to thank our teams and staff for their invaluable support and dedication to making genomics an internationally recognized sector of excellence. It constitutes a major hub of talent and expertise for Génome Québec.

Daniel Coderre

2017-2018 HIGHLIGHTS

STRATEGIC PLAN

Developed after a consultation process with researchers, partners and policymakers, the Génome Québec Strategic Plan for 2018-2023 was **adopted unanimously** by its Board of Directors.

It sets out to leverage our critical mass of researchers in order to make Québec one of the world's most innovative and creative societies.

SCIENTIFIC AFFAIRS

The Scientific Affairs team ensured the follow-up of **59 active projects** in the strategic sectors of human health, agrifood, forestry and the environment.

COMPETITIONS

Four Québec research teams were awarded 30% of the federal funding available under the Genome Canada *Genomics and Precision Health* competition, resulting in an overall investment of **$58 million** in the development of genomics in Québec.

Three Québec Centres of Excellence received **$20 million** as part of the *Genomics Technology Platforms* competition held by Genome Canada.

EDUCATION

Youth **education**, **professional training** and **social acceptance** are now strategic priorities for Génome Québec. They are crucial to deriving maximum benefits from the investments made in genomics over the past two decades and stimulating economic growth in Québec.

SERVICE EXCELLENCE

McGill University and Génome Québec Innovation Centre delivered services to 964 research teams. The user satisfaction rate is **96%**.

INTERNATIONAL COLLABORATIONS

A partnership agreement was signed with the **United Kingdom** to develop a specialized training program on genomics for health professionals. Agreements have also been reached with **France** and **Israel** aiming to stimulate genomics research in various strategic sectors.

SCIENTIFIC OUTREACH

Genomics has made sustained progress in recent years. Through genomics, researchers are now equipped to offer real-world solutions to many crucial societal issues.

Every year, Génome Québec supports dozens of Québec research teams to help them rank favourably on the provincial and national stage in different strategic sectors, such as human health, agrifood, forestry and the environment. In 2017-2018, the Scientific Affairs team ensured the follow-up of a portfolio of 59 active projects, including the management of research oversight committees with 50 international experts.

QUÉBEC RESEARCHERS MAKE THEIR MARK

Thanks to this support, Québec researchers have excelled all year in several national Genome Canada competitions, thus securing significant shares of funding to achieve their projects.

As part of the *Genomics and Precision Health* competition, four research teams led by Québec researchers and four pan-Canadian teams that includes local researchers, shared close to $20 million worth of funding. This amount represents nearly 30% of the federal funding available, resulting in an overall investment of some $58 million in the development of genomics in Québec.

The projects focus on bringing precision medicine to the clinic in order to optimize prevention, facilitate diagnosis and improve treatment.

In 2017-2018, three Québec research teams were also awarded funding under the *Genomic Applications Partnership Program*. They secured a total of $11 million for projects in health, agrifood and the environment.

Lastly, three Québec Excellence Centres and two principal co-investigators from pan-Canadian centres received $20 million as part of the *Genomics Technology Platforms* competition. They can continue to provide high-quality tools, technology and services to the scientific community.

A major study finally reveals the secrets on the genetics of breast cancer – Prof. Jacques Simard from the CR-CHU de Québec-Université Laval is one of the lead authors of this important work.

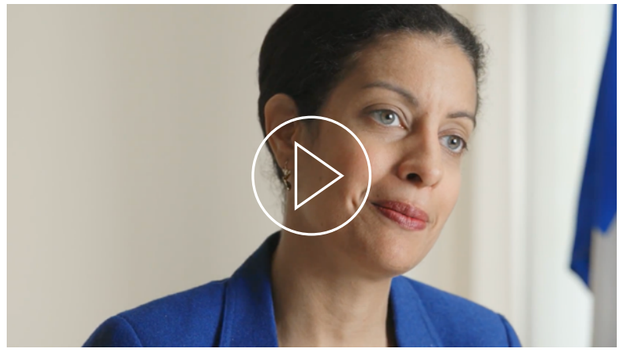
Read the article

The biggest study on whole-genome sequencing that allowed the identification of eight new epilepsy genes was led by Dr. Jacques L. Michaud from the CHU Sainte-Justine.

Read the article

Dominique Anglade, Deputy Premier, Minister of Economy, Science and Innovation and Minister responsible for the Digital Strategy, commends the excellence of Québec researchers. (French only)

Watch the video



Génome Québec salutes Québec researchers.

Watch the video

A NEW COMPETITION TO OPTIMIZE "OMICS" RESEARCH DATA

This year, the Scientific Affairs team also managed the launch of Genome Canada's new *2017 Bioinformatics and Computational Biology Competition*. The aim of the program is to develop new tools and methodologies to process, analyze and integrate the large volume of complex data from "omics" technologies. With the support of Génome Québec, researchers in the province will have the chance to obtain funding, which they can use to propose innovative solutions that maximize the value of these datasets.

SUMMARY OF 2017-2018 NEW PROJECTS FUNDING

Total budget of active projects	$68.4 M
Number of teams supported	48
Number of projects funded	13
Genome Canada funding awarded in Québec	$25.8 M
Genome Canada funding awarded in Canada	$87.7 M
Annual success rate in Québec	29.4 %
Number of active projects in the portfolio	**59**

TECHNOLOGICAL OUTREACH

The Génome Québec technology platforms benefit the entire scientific community and industry.

Drawing on a highly skilled staff and cutting-edge infrastructure, the platforms provide researchers both at home and abroad with services that range from genotyping and biobanking to gene sequencing, gene expression, epigenomics and bioinformatics. These services are offered at the following facilities:

- McGill University and Génome Québec Innovation Centre
- CHU Sainte-Justine and Génome Québec Integrated Centre for Pediatric Clinical Genomics
- Génome Québec and Centre hospitalier affilié universitaire régional de Chicoutimi Biobank

Génome Québec also coordinates access to the clinical cohort of the Genizon Biobank, and contributes to the promotion of the CARTaGENE longitudinal population-based cohort, the Canadian Centre for Computational Genomics (C3G) and the Centre for Advanced Protemoic and Chemogenomic Analyses (CAPA).

These platforms attract large-scale projects from around the world given their reliable, fast and comprehensive services that lead to high-quality results and major breakthroughs.

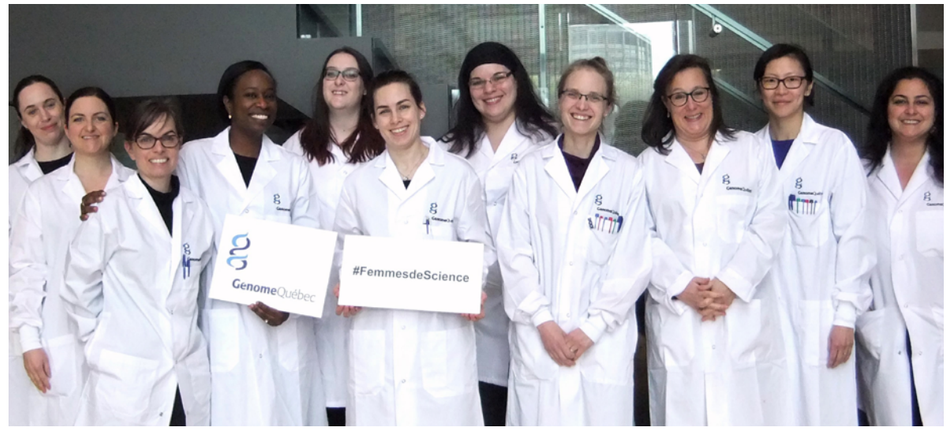
2017-2018 HIGHLIGHTS

In the past year, 964 research teams from 28 countries have used the services of the McGill University and Génome Québec Innovation Centre, for a traffic rate comparable to previous years. The Centre generated over $13.5 million in revenues, with $2 million from international sources (15%).

In order to continue providing the scientific community with the very latest equipment, the Centre also acquired in October the all new NovaSeq 6000 sequencing system by Illumina, a first in Canada. With the new device, the Centre, which already enjoys an overall user satisfaction rate of 96%, will be able to provide even more comprehensive and timely services.

The CHU Sainte-Justine and Génome Québec Integrated Pediatric Clinical Genomics Centre is preparing to diversify its service offering with a view to integrating genomics into applied fields, such as the diagnosis and clinical screening of rare diseases.

It was a record year at the Génome Québec and Centre hospitalier affilié universitaire régional de Chicoutimi Biobank, which performed the highest number ever of DNA extractions from CARTaGENE. The number of requests from the scientific community has, in fact, been growing steadily for the past two years. With more and more data available, scientists are now turning to CARTaGENE for their research needs.



Members of the Génome Québec and McGill University Innovation Centre team celebrates the International Day of Women and Girls in Science.

STRATEGIC DEVELOPMENT AND PUBLIC OUTREACH

This year has been a busy one for our organization, as we worked on defining our strategic orientations and our role within the ecosystem. Following a major consultation process with members of the scientific community, partners and policymakers, we established our vision and positioning for the next five years.

The exercise revealed that meaningful and ongoing dialogue between the scientific community and society at large has become critical if we are to reap the benefits of investments made in genomics, and facilitate the integration and understanding of the technology. Consequently, one of the four strategic objectives featured in our five-year plan involves positioning Génome Québec as a key provider of public education and social acceptance activities.

For our Strategic Development and Public Affairs department, this entailed spearheading a series of initiatives throughout the year:

- Launch of a consultation process and production of our 2018–2023 strategic plan.
- Development of a proposal on a public education and training component.
- Establishment of a credible positioning with respect to social acceptance.

As a noteworthy development, Génome Québec, for the first time in its history, secured funding, by decree, for the last two initiatives. A new position was also created and filled in November 2017.

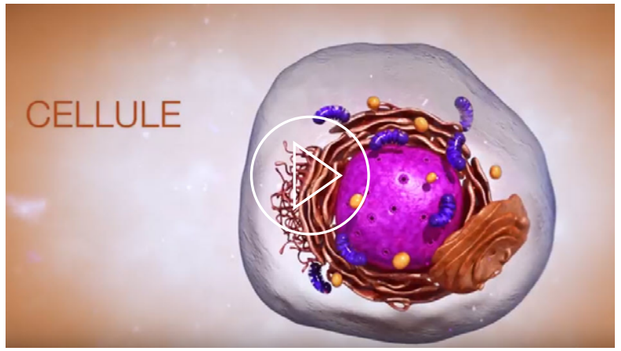
LAUNCH AN EDUCATION AND TRAINING PLATFORM

With the funding obtained, an education platform for high school students was designed and developed, in partnership with an advisory committee composed of teachers and science educational consultants. The objective is to fuel the interest of young Quebecers for science and promote careers in the field with lively educational content and a complementary lineup of classroom activities. This education platform was officially launched in spring 2018.

Simultaneously, our team worked with the Quebec Network for Personalized Healthcare (QNPHC) on developing an *Introduction to Genomics* online training for health professionals. The initiative, which seeks to promote the integration of genomics into medical practice, is the result of an agreement with Health Education England, the education branch of the National Health Service in the United Kingdom. It offers superior quality education and training to healthcare workers in England.

This continuing education opportunity, which will be offered online starting in summer 2018, is now accredited by the Centre de formation continue of the Faculty of Medicine and Health Sciences at Université de Sherbrooke.

Discover the platform



Development of a new Flight450 minilab in the Québec City area, through a partnership with the Institute for integrative systems biology of Université Laval. We were able to reach a total of 16 schools and 1,288 students in the greater Montréal and Québec regions. (French only)

Watch the video

Partnership agreement with Let's Talk Science and dissemination of a DNA kit in 12 classrooms (224 students) across Québec. Moreover, 180 Québec students also participated in 3 additional activities on biotechnology and the discovery of DNA.

STRATEGIC DEVELOPMENT AND PUBLIC OUTREACH (CONT'D)

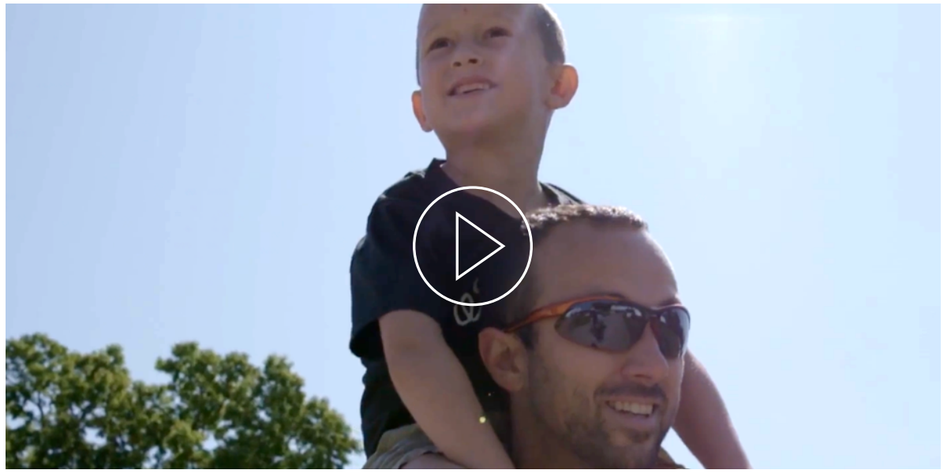
ESTABLISH OUR POSITIONING WITH RESPECT TO SOCIAL ACCEPTANCE

One of the priorities identified, involved the need to develop credible content on themes that could generate questions and fears among the general public and policymakers.

In the interest of transparency and thoroughness, we asked the Centre of Genomics and Policy of McGill University to produce policy briefs on three relevant issues: genetic discrimination, genome editing (CRISPR) and the access and sharing of genetic data. The purpose of these briefs is to stimulate public debate and ensure that we are capable of responding with clear and reasoned arguments, and thus serve as a credible reference in matters of public policy.

A scientific café was held on October 5, 2018 in Montréal to discuss genetic discrimination with science journalists and the general public. Some 100 participants were in attendance. The event was hosted by Jean-François Cliche, journalist at *Le Soleil* with guests Yann Joly, a professor at the Department of Human Genetics at McGill University, and Daniel Sinnett, a researcher at the CHU Sainte-Justine.

To prepare for the development of the Social Acceptance component, Génome Québec tasked Pôle santé HEC Montréal with conducting a study to evaluate the perception of the Québec public regarding genomics. The goal is to obtain a robust portrait of the level of understanding of citizens and major influencers in order to acquire the tools needed to build a communication strategy tailored to the needs of our specific target audience groups. The study is currently underway and a report is expected in fall 2018.



View this video and discover the impact of genomics in strategic sectors such as health, agrifood, forestry and the environment.

Watch the video

PROMOTE RESEARCHERS AND THEIR DISCOVERIES

In terms of research promotion activities, our team produced two videos, one of which features research teams awarded funding under the Genome Canada *Genomics and Precision Health* competition. Moreover, major media relations efforts have been deployed to support Professor Jacques Simard in promoting his latest publications in the scientific journal *Nature* and *Nature Genetics*.

A panel was also held as part of the Québec City Healthcare Industry Forum themed "*Health innovations and public understanding: The urgent need to close the gap*". Hosted by journalist Esther Bégin, the panel included Pierre Lavoie, Michel Rochon, science journalist, and Étienne Crevier from BiogeniQ.

Prof. Jacques Simard at Patrice Roy en direct on ICI RDI October 23th, 2017

FINANCIAL ACTIVITY REPORT

Génome Québec receives most of its financial support from the Québec government and Genome Canada for the funding of research projects and the operation of its technology centres.

As of March 31, 2018, our research portfolio includes 59 research projects, while three technology centres are currently in operation. Génome Québec invested $53.5 million during the 2017-2018 fiscal year. This amount, combined with the $29.4 million invested by other partners, brings our overall injection of funds to $82.9 million, a decrease of 6.3% over last year.

Business volume generated by research projects during this fiscal year amounted to $62 million. The most important activities are from the *Genomics and Personalized Health* competition and the *Fonds de partenariat pour un Québec innovant et en santé*. This year, new projects issued from the *Genomic Applications Partnership Program* and the *Societal Implications of Genomics Research* competition were launched. The budget for projects underway totals $352 million, $84 million of which is still to be carried out.

For the year ended on March 31, 2018, sales arising from the technology centres totalled $13.9 million, down 16.1% compared to last year. However, the technology centres posted an excess of revenues over expenses of $805,983 compared to $685,373 from the previous fiscal year.

General and administrative expenses, business development and communications and committee expenses amounted to $2.7 million, a decrease of $190,735 compared to last fiscal year. Strategic development expenses totalled $222,157. After certain adjustments, these expenses represent 3.6% of total investments for the year. Investment and intellectual property revenues reached $657,695, for a return of 1.24%.

The excess of revenue over expenses totalling $1,149,322 is the combined effect of the surplus of $805,983 generated by the technology centres, the investment and intellectual property revenues of $657,695, minus activities carried out without government funding, that is strategic development of $222,157 and support to researchers of $92,199. Unrestricted net assets decreased $274,379, reaching a total of $2,423,643 on March 31, 2018. Net assets dedicated to activities increased by $587,801 during the fiscal year and represent a net balance of $662,388. The technology investment and contingency funds net assets totals $1,577,133.

Finally, Génome Québec has respected the terms and conditions in compliance with the contractual agreements it has signed with its major financial partners.

Daniel Coderre
President and CEO
Génome Québec

Claude Lamarre
Vice President, Finance
Génome Québec

STATEMENT OF FINANCIAL POSITION MARCH 31 2018, WITH COMPARATIVE INFORMATION FOR 2017

The Statement of Financial Position as at March 31, 2018 and 2017, and the Statement of Operations for the years ended March 31, 2018 and 2017 that follow are provided as illustrative summaries only and are not intended to replace the full financial statements of Génome Québec. These full financial statements, available in French only, were audited by KPMG LLP, Chartered Professional Accountants, and reported on June 19, 2018.

ASSETS

	2018 ($)	2017 ($)
Current Assets		
Cash and cash equivalents	4,504,807	41,431,851
Short-term investments	20,446,553	12,347,946
Contributions receivable	3,161,000	–
Accounts receivable and work in progress	2,767,582	4,365,069
Advances to genomics research projects	–	7,606,302
Inventories	1,430,704	2,126,461
Prepaid expenses	163,212	126,256
	$32,473,858	**$68,003,885**
Long-term investments	28,099,774	–
Capital assets	251,769	393,582
	$60,825,401	**$68,397,467**

STATEMENT OF FINANCIAL POSITION MARCH 31 2018, WITH COMPARATIVE INFORMATION FOR 2017 (CONT'D)

LIABILITIES AND NET ASSETS

	2018 ($)	2017 ($)
Current liabilities		
Accounts payable and accrued liabilities	2,927,043	3,757,975
Due to research projects	505,261	–
Deferred revenues	461,841	351,076
	$3,894,145	**$4,109,051**
Deferred contributions		
Future expenses	52,016,323	60,387,129
Capital assets	245,794	381,470
	$52,262,117	**$60,768,599**
	$56,156,262	**$64,877,650**
Net assets		
Unrestricted	2,423,643	2,698,022
Restricted – Invested in capital assets	5,975	12,112
Restricted – Technology investment and contingency funds	1,577,133	735,096
Restricted – Research projects	662,388	74,587
	$4,669,139	**$3,519,817**
	$60,825,401	**$68,397,467**

STATEMENT OF OPERATIONS – YEAR ENDED MARCH 31, 2018 WITH 2017 COMPARATIVE INFORMATION

	2018 ($)	2017 ($)
Revenues		
Amortization of deferred contributions related to expenses	40,828,880	37,694,787
Amortization of deferred contributions related to capital assets	195,660	215,572
Investment and intellectual property revenues	657,695	162,326
Revenues from technology centres	13,875,705	16,545,317
Other revenues	496,856	451,035
	$56,054,796	**$55,069,037**
Expenses		
Genomics research projects	20,376,541	16,913,187
Research projects, Québec Innovant et en Santé	13,039,470	13,885,311
Technology centres operational costs	18,371,978	20,461,899
General and administrative expenses	2,425,532	2,587,338
General and administrative expenses, Québec Innovant et en santé	127,376	128,632
Business development and communications	127,609	147,559
Committees	6,186	13,909
Strategic Development	222,157	–
Depreciation of capital assets	195,660	215,572
Depreciation of restricted capital assets	12,965	27,930
	$54,905,474	**$54,381,337**
EXCESS OF REVENUES OVER EXPENSES	**$1,149,322**	**$687,700**

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Tu Linh Van

LARGE-SCALE PROJECT OUTCOMES

GENOMIC APPLICATION PARTNERSHIP PROGRAM (GAPP)

JANUARY 1-DECEMBER 31, 2017

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
STEVE LABRIE - **ULAVAL** Metagenomics and cheesemaking technologies	2014 - 04	1.92	0.25	0	0	0
ADRIAN TSANG - **UCONCORDIA** Enzyme supplement for swine and poultry	2014 - 10	13.81	0	0	0	0
RICHARD HAMELIN - **UBC** **ROGER C. LEVESQUE** - **ULAVAL** Next generation biosurveillance of invasive alien species	2014 - 10	3.11	0	1	1	0
JEAN BOUSQUET - **ULAVAL** FastTRAC (fast tests for rating and amelioration of conifers)	2015 - 04	19.38	2	2	10	0
MICHEL G. BERGERON - **CHU DE QUÉBEC** New test to rapidly diagnose infections	2015 - 10	16.52	0	0	2	0
CHRISTOPH BORCHERS - **JEWISH GENERAL HOSPITAL** New test for patient selection for cancer treatment	2016 - 04	7.45	3	1	37	0
CHARLES GOULET - **ULAVAL** A genetic toolbox for tomato flavour differentiation	2016 - 04	4.70	3.50	0	0	1
PIERRE THIBAULT - **UMONTRÉAL** Mass spectrometry improvement for personalized medicine	2016 - 10	3.93	1.37	1	6	0
CLAUDE ROBERT - **ULAVAL** Improve swine genetics	2016 - 10	3.02	0	0	0	0
ADRIAN TSANG - **UCONCORDIA** Lysozyme feed additives to improve gut health and productivity of food animals	2017 - 10	1.48	0	0	0	0
PAUL GOODYER - **MUHC** Novel Aminoglycoside Readthrough Therapy for Nonsense Mutations	2018 - 04	Data available in July 2018				
CLAUDE ROBERT - **ULAVAL** Use of genomics to manage and protect caribou populations	2018 - 04					
TOTAL		**75.31**	**10.12**	**5**	**56**	**1**

2017 COMPETITION: GENOMICS AND PRECISION HEALTH

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
NADA JABADO - **MUHC RESEARCH INSTITUTE** Tackling childhood brain cancer at the root to improve survival and quality of life	2018 - 04					
FRANÇOIS ROUSSEAU - **ULAVAL** PEGASUS-2: Personalized Genomics for Prenatal Abnormalities Screening Using Maternal Blood: Towards first-tier screening and beyond	2018 - 04					
GUY SAUVAGEAU - **UMONTRÉAL** Interrogating and implementing Omics for precision medicine in acute myeloid leukemia	2018 - 04					
JACQUES SIMARD - **ULAVAL** Personalized risk assessment for prevention and early detection of breast cancer: Integration and Implementation	2018 - 04					
PAUL KEOWN - **UBC** **RUTH SAPIR-PICHHADZE** - **MCGILL** Precision Medicine CanPREVENT AMR: Applying precision medicine technologies in Canada to prevent antibody-mediated rejection and premature kidney transplant loss	2018 - 04	Data available October 2018				
ALISON M. ELLIOTT - **UBC** **BARTHA MARIA KNOPPERS** - **MCGILL** GenCOUNSEL: Optimization of genetic counselling for clinical implementation of genome-wide sequencing	2018 - 04					
KYM BOYCOTT - **UOTTAWA** **BARTHA MARIA KNOPPERS** - **MCGILL** Care4Rare Canada: Harnessing multi-omics to deliver innovative diagnostic care for rare genetic diseases in Canada (C4R-SOLVE)	2018 - 04					
FELIX RATJEN - **SICK KIDS** **BARTHA MARIA KNOPPERS** - **MCGILL** Personalized therapy for individuals with cystic fibrosis	2018 - 04					
TOTAL		–	–	–	–	–

LARGE-SCALE PROJECT OUTCOMES (CONT'D)

GENOMICS TECHNOLOGY PLATFORMS

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
GUILLAUME BOURQUE - MCGILL Canadian Centre for Computational Genomic (C3G)	2017 - 04	13.80	0	21	11	0
MARK LATHROP - MCGILL McGill University and Génome Québec Innovation Centre	2017 - 04	25.33	0	190	9	0
PIERRE THIBAULT - UMONTRÉAL Centre for Advanced Proteomic and Chemogenomic Analyses	2017 - 04	7.69	0	11	8	0
TOTAL		**46.82**	**0**	**222**	**28**	**0**

COMPETITION: FONDS DE PARTENARIAT POUR UN QUÉBEC INNOVANT ET EN SANTÉ

FOR 2017-2018						
GERALD BATIST - JEWISH GENERAL HOSPITAL Personalized health care network Q-CROC	2014 - 04	40.66	0	2	6	0
MICHEL G. BERGERON - CHU DE QUÉBEC Rapid molecular diagnosis of infections (C Diff, BMDR)	2014 - 04	10.83	1	0	0	2
MICHEL BOUVIER - UMONTRÉAL Drug discovery	2014 - 04	66.32	5.19	4	12	5
NICOLA HAGEMEISTER - ÉTS Improve diagnosis and treatment for arthritis of the knee	2014 - 10	12.34	1	2	0	0
PAVEL HAMET - CHUM Optimization of the therapeutic approaches in primary care - OPTI-THERA	2014 - 04	Completed project				
JEAN-CLAUDE TARDIF - MHI ARTERIA Program - Cardiovascular personalized diagnostics and therapies	2014 - 04	44.65	1	6	12	1
BRIAN WARD - MUHC Development of vaccines against pneumonia using plants	2014 - 04	17.51	4.61	4	5	0
TOTAL		**192.31**	**12.80**	**18**	**35**	**8**

2015 COMPETITION: LARGE-SCALE RESEARCH PROJECTS - NATURAL RESOURCES AND THE ENVIRONMENT - SECTOR CHALLENGES - GENOMIC SOLUTIONS

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
SÉBASTIEN SAUVÉ - UMONTRÉAL Algal blooms, treatment, risk assessment, prediction and prevention through genomics	2016 - 10	37.81	15.23	7	38	0
NILADRI BASU - MCGILL Development of a toxicogenomics analysis tool	2016 - 10	22.21	7.94	0	7	0
JÖRG BOHLMANN - UBC **JEAN BOUSQUET - ULAVAL** Spruce-Up (advanced spruce genomics)	2016 - 10	18.74	3.55	5	5	0
RICHARD HAMELIN - UBC **ILGA PORTH - ULAVAL** BioSAFE (BioSurveillance of Alien Forest Enemies)	2016 - 10	16.79	7.09	0	5	0
SALLY AITKEN - UBC **RICHARD HAMELIN - ULAVAL** CoAdapTree (healthy trees for future climates)	2016 - 10	1.76	0.11	0	3	0
LESLEY WARREN - UTORONTO **CHRISTIAN BARON - UMONTRÉAL** Next generation biological treatment of mining waste-waters	2016 - 10	0.60	0	0	0	0
CASEY HUBERT - UCALGARY **CHARLES GREER - MCGILL** Microbial genomics for oil spill preparedness in Canada's Arctic marine environment	2016 - 10	1.61	0	3	5	0
EMMA MASTER - UTORONTO **ADRIAN TSANG - UCONCORDIA** SYNBIOMICS (advanced biopolymer synthesis)	2017 - 01	13.29	0	0	0	0
TOTAL		**112.80**	**33.92**	**15**	**63**	**0**

LARGE-SCALE PROJECT OUTCOMES (CONT'D)

2015 BIOINFORMATICS AND COMPUTATIONAL BIOLOGY COMPETITION

OCTOBER 1, 2016-SEPTEMBER 30, 2017

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
FRANÇOIS MAJOR - UMONTRÉAL Development of RNAi-based therapeutics agents	2016 - 10	3.11	1.16	0	3	1
JESSE SHAPIRO - UMONTRÉAL Toolkit for genome-wide association studies in bacteria	2016 - 10	1.50	0.75	0	2	0
JÉRÔME WALDISPÜHL - MCGILL Identification of small RNA-binding molecules regulating gene expression	2016 - 10	7.85	6.50	1	1	0
JÉRÔME WALDISPÜHL - MCGILL Crowdsourcing genomic databases	2016 - 10	5.65	3.77	1	1	0
TOTAL		**18.11**	**12.18**	**2**	**7**	**1**

2014 GENOMICS AND FEEDING THE FUTURE COMPETITION

FOR 2017-2018

FRANÇOIS BELZILE - ULAVAL Improving yield and disease resistance in short-season soybean (SoyaGen)	2015 - 10	27.05	12.63	4	7	0
LAWRENCE GOODRIDGE - MCGILL **ROGER C. LEVESQUE - ULAVAL** Ensure food safety and reduce the economic burden of salmonellosis	2015 - 10	25.51	4.65	5	8	1
LEONARD FOSTER - UBC **NICOLAS DEROME - ULAVAL** Sustaining and securing Canada's honey bees using 'omic' tools	2015 - 10	3.51	1	0	0	0
WILLIAM S. DAVIDSON - UBC **LOUIS BERNATCHEZ - ULAVAL** Enhancing production in Coho: culture, community, catch (EPIC4)	2015 - 10	8.63	0	1	2	0
TOTAL		**64.70**	**18.28**	**10**	**17**	**1**

2015 DISRUPTIVE INNOVATION IN GENOMICS (DIG) COMPETITION

JULY 1, 2016-JUNE 30, 2017

PHASE 1	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
SANTIAGO COSTANTINO - HÔPITAL MAISONNEUVE-ROSEMONT Laser assisted single-cell genomics	2016 - 07	5.45	3	1	6	1
DAVID JUNCKER - MCGILL Single exosome multi-omic analysis	2016 - 07	6.95	4	0	1	0
ÉRIC LÉCUYER - IRCM RNA zipcode discovery pipeline	2016 - 07	1.85	0.10	0	0	0
MARK TRIFIRO - JEWISH GENERAL HOSPITAL Rapid diagnostics through plasmonic PCR	2016 - 07	7.30	3.75	1	1	2
MICHAEL TYERS - UMONTRÉAL Cell microfactory platform	2016 - 07	1.99	0.36	0	0	0
PHASE 2						
SACHDEV SIDHU - UTORONTO **EL BACHIR AFFAR - HÔPITAL MAISONNEUVE-ROSEMONT** Synthetic inhibitors of ubiquitin-binding cancer targets	2016 - 07	4.55	0	1	2	0
TOTAL		**28.09**	**11.21**	**3**	**10**	**3**

SHARING BIG DATA FOR HEALTH CARE INNOVATION: ADVANCING THE OBJECTIVES OF THE GLOBAL ALLIANCE FOR GENOMICS AND HEALTH

BARTHA MARIA KNOPPERS - P3G Canadian international data sharing initiative to accelerate health care innovation (Can-SHARE)	2015 - 06	17.57	0.25	11	11	0
TOTAL		**17.57**	**0.25**	**11**	**11**	**0**

LARGE-SCALE PROJECT OUTCOMES (CONT'D)

2012 GENOMICS AND PERSONALIZED HEALTH COMPETITION

FOR 2017-2018	Project starting date	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
CLAUDE PERREAULT - HÔPITAL MAISONNEUVE-ROSEMONT Personalized cancer immunotherapy	2013 - 04	5.20	1	2	19	0
PATRICK COSSETTE - CHUM Personalized medicine in the treatment of epilepsy	2013 - 04	4.06	0.46	3	0	0
FRANÇOIS ROUSSEAU - ULAVAL Personalized genomics for prenatal aneuploidy screening using maternal blood (PEGASUS)	2013 - 04	10.42	2.48	2	10	0
JACQUES SIMARD - ULAVAL Personalized risk stratification for the prevention and early detection of breast cancer	2013 - 04	22.25	6.17	8	9	0
JOHN D. RIOUX - MHI Inflammatory bowel diseases Genomic Medicine Consortium (iGenoMed)	2013 - 04	12.51	0.50	3	9	0
NADA JABADO - RESEARCH INSTITUTE OF THE MUHC Biomarkers for pediatric glioblastoma through genomics and epigenomics	2013 - 04	8.41	4.21	2	12	0
DON SIN - UBC **ELIZATETH MACNAMARA - JEWISH GENERAL HOSPITAL** Clinical Implementation and Outcomes Evaluation of Blood-based Biomarkers for COPD Management	2013 - 04	2.60	0	0	0	0
RICHARD HARRIGAN - UBC **HUGUES CHAREST - INSPQ** **MICHEL ROGER - UMONTRÉAL** **MARK WAINBERG - MCGILL** Viral and Human Genetic Predictors of Response to HIV Therapies	2013 - 04	0.49	0	1	0	0
CHRISTOPHER MCCABE - UALBERTA **RICHARD GOLD - MCGILL** **JONATHAN KIMMELMAN - MCGILL** ACE-'Omics: Personalized, Accessible, Cost-Effective applications of 'Omics technologies	2013 - 04	6.58	0	5	3	0
KIM BOYCOTT - UOTTAWA **BARTHA MARIA KNOPPERS - MCGILL** **JACEK MAJEWSKI - MCGILL** **JACQUES L. MICHAUD - CHU STE-JUSTINE** Enhanced CARE for RARE Genetic Diseases in Canada	2013 - 04	2.27	0	14	0	0
TOTAL		**74.79**	**14.82**	**40**	**62**	**0**
TOTAL ONGOING PROJECTS		**631**	**114**	**326**	**289**	**14**

ASSESSMENT OF COMPLETED PROJECTS

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
2012 GENOMICS AND PERSONALIZED HEALTH COMPETITION						
GUY SAUVAGEAU - UMONTRÉAL Innovative chemo-genomic tools to improve clinical outcome in acute myeloid leukemia	4.75 years	64.75	9.4	16	30	6
JEAN-CLAUDE TARDIF - MHI Personalized medicine strategies for molecular diagnostics and targeted therapeutics of cardiovascular diseases	4.25 years	71.73	10.11	14	16	2
GENOMICS INNOVATION NETWORK COMPETITION						
CORE OPERATION SUPPORT						
PHILIP AWADALLA - CHU STE-JUSTINE Canadian Data Integration Centre (CDIC)	2 years	11.25	0	15	35	0
GUILLAUME BOURQUE - MCGILL Canadian Centre for Computational Genomics (C3G)	2 years	30.15	0	81	19	0
MARK LATHROP - MCGILL McGill University and Génome Québec Innovation Centre	2 years	100.81	0	371	0	0
PIERRE THIBAULT - UMONTRÉAL Centre for Advanced Proteomic Analyses (CAPA)	2 years	14.04	0	35	21	3
TECHNOLOGY DEVELOPMENT						
GUILLAUME BOURQUE - MCGILL Canadian Centre for Computational Genomics (C3G)	2 years	3.70	0	10	1	0
MARK LATHROP - MCGILL McGill University and Génome Québec Innovation Centre	2 years	18.62	0	17	0	0

ASSESSMENT OF COMPLETED PROJECTS (CONT'D)

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
2012 COMPETITION: BIOINFORMATICS AND COMPUTATIONAL BIOLOGY						
JÉROME WALDISPÜHL - MCGILL A development and deployment platform for citizen science games in genomics	2.5 years	15.25	4.72	3	10	1
MATHIEU BLANCHETTE - MCGILL PIATEA: A portal for integrative approaches to transposable element annotation	2.25 years	11.55	3.5	3	7	0
ANNE-CLAUDE GINGRAS - SAMUEL LUNENFELD RESEARCH INSTITUTE MIKE TYERS - UMONTRÉAL ProHits Next Generation: A flexible system for tracking, analyzing and reporting functional proteomics data	2.75 years	5.5	0	5	24	1
ABC COMPETITION						
THOMAS BUREAU - MCGILL Bridging Comparative, Population and Functional Genomics to Identify and Experimentally Validate Novel Regulatory Regions and Genes for Crop Improvement	5 years	58	11	22	54	3
ADRIAN TSANG - UCONCORDIA Genozymes for Bioproducts and Bioprocesses Development	5 years	314.3	35	52	37	13
PETER FACCHINI - UALBERTA VINCENT MARTIN - UCONCORDIA Synthetic Biosystems for the Production of High Value Plant Metabolites	5 years	38.7	0	44	74	27
PETER PHILLIPS - USASK RICHARD GOLD - MCGILL Value Addition through Genomics	5 years	11	0	50	145	0

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
2010 COMPETITION: LARGE-SCALE APPLIED RESEARCH PROJECTS						
JOHN MACKAY - ULAVAL JÖRG BOHLMANN - UBC SMarTForest: Spruce Marker Technologies for Sustainable Forestry	4 years	165.8	37.5	68	115	0
FRANZ B. LANG - UMONTRÉAL MOHAMED HIJRI - UMONTRÉAL Improving Bioremediation of Polluted Soils through Environmental Genomics	4 years	154.2	55.1	25	84	0
GQ PILOT PROJECTS COMPETITION						
JAMIE ENGERT - RESEARCH INSTITUTE OF THE MUHC High Throughput Genotyping and Sequencing Using Pooled DNA/RNA	2 years	3	0	0	0	0
JULIE ST-PIERRE - MCGILL Metabolomics of ErbB2-induced breast tumors	2 years	4.4	1	1	1	0
PIERRE DRAPEAU - UMONTRÉAL EDOR KABASHI - UMONTRÉAL Chemical genetic screens for TDP-43 modifiers and amyotrophic lateral sclerosis therapeutics	2 years	9.8	6	3	12	1
ROGER C. LEVESQUE - ULAVAL BEGAB: Budwork EcoGenomics: applications and technologies	2 years	8.5	2	3	15	0
SARAH KIMMINS - MCGILL Determining the role of the paternal epigenome in offspring health	2 years	5.6	3.1	2	9	0
ZOHA KIBAR - CHU STE-JUSTINE Whole exome resequencing in familial neural tube defects	2 years	4.8	0	0	0	0

ASSESSMENT OF COMPLETED PROJECTS (CONT'D)

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
GQ HEALTH COMPETITION						
GREGOR ANDELFINGER - CHU STE-JUSTINE Comprehensive genomic analysis of patients with congenital heart disease	4 years	9.7	2.4	2	4	1
GUY A. ROULEAU - CHUM Next-generation sequencing approach to identify bipolar disorder genes	3 years	12.9	0.2	5	5	0
GUY SAUVAGEAU - UMONTRÉAL Leucegene Project: Transcriptome sequencing to identify novel prognostic markers and therapeutic targets in acute myeloid leukemia	3 years	28	2.2	7	9	5
JOHN H. WHITE - MCGILL Host macrophage transcriptomic responses to M. Tuberculosis infection	3 years	15.8	6.7	5	14	0
KEN DEWAR - MCGILL The cartography of intestinal microbial communities in a non-human primate model system	3 years	18.1	5.8	3	9	0
MARK BASIK - JEWISH GENERAL HOSPITAL Molecular profiling of drug resistant triple negative breast cancer	4.5 years	36.1	10.5	7	20	0
MICHAEL HALLET - MCGILL Next-generation predictive signatures for breast cancer	4 years	22.3	5	5	5	0
ALAIN MOREAU - CHU STE-JUSTINE Genomics of pediatric scoliosis innovation platform: from genes to comprehensive diagnostic assays	4 years	26.6	11.8	4	3	0
MICHEL G. BERGERON - ULAVAL Simple microfluidic system for rapid and robust identification of pathogens by real-time PCR at point-of-care	2 years	12	1	0	8	1
MARYAM TABRIZIAN - MCGILL Portable SPR-based digital microfluidic array platform	4 years	17.7	6.7	15	19	0
PAUL GOODYER - RESEARCH INSTITUTE OF THE MUHC Cell therapy of cystinosis	3 years	18.1	7.1	1	10	0
PAVEL HAMET - CHUM Development of a predictive tool for micro and macrovascular complications in patients with Type 2 Diabetes	3.5 years	27.4	5.7	0	22	6
GORDON SHORE - MCGILL **MICHEL L. TREMBLAY - MCGILL** Therapeutic development platform: targeting metabolism in cancer therapy	3.5 years	18.3	2.7	0	6	1

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
COMPETITION - QUÉBEC VERT						
FRANÇOIS BELZILE - ULAVAL GreenSNPs: an enabling technology for environmental genomics in aquatic or land animals and plants	2 years	5.6	2	4	9	0
CONNIE LOVEJOY - ULAVAL Genomes and Transcriptomes of Arctic Chromists (GTAC)	1.5 year	4.2	1.2	0	3	0
VINCENT MARTIN - UCONCORDIA A Platform for Automated Yeast Genome Engineering (PAYGE)	2 years	2.6	0	0	0	0
ENTREPRENEURSHIP PROGRAM - EDUCATION IN GENOMICS						
DENIS J. GARAND - ULAVAL Boosting Entrepreneurial Skills and Training: BEST in Genomics!	3 years	14.1	2.3	0	17	0
GÉNOME QUÉBEC RECRUITMENT PROGRAM - HUMAN HEALTH						
CARTaGENE DIRECTOR						
SÉBASTIEN JACQUEMONT - CHU STE-JUSTINE CARTaGENE	5 years	65.17	0	53	42	0
HUMAN HEALTH						
MARK LATHROP - MCGILL Medical genomics	5 years	39.98	5.62	36	0	0
MIKE TYERS - UMONTRÉAL Biological network in human health	6 years	88.42	19.62	53	37	4

ASSESSMENT OF COMPLETED PROJECTS (CONT'D)

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
COMPETITIONS I & II, HEALTH						
MICHEL G. BERGERON - CHU DE QUÉBEC Novel Rapid Molecular Theranostic Technologies for Nucleic Acid Detection	3.25 years	118	25	25	58	11
DEMING XU - PRIVATE Chemogenomics-Driven Drug Discovery in the Human Fungal Pathogen, Candida albicans	3 years	101	2	8	4	1
THOMAS J. HUDSON - MCGILL Assessment of Risk for Colorectal Tumors in Canada (ARCTIC)	3.25 years	42	6	19	15	9
FRANZ B. LANG - UMONTRÉAL The Protist EST Program	3.5 years	49	21	20	18	0
HOWARD BUSSEY - MCGILL **STEPHEN MICHNICK - MCGILL** Projects in Functional Genomics using Model Organisms	4 years	20	4	18	55	0
JOHN J.M. BERGERON - MCGILL Montreal Network for Pharmaco-Proteomics and Structural Genomics	4 years	174	67	42	125	7
FERNAND LABRIE - ULAVAL Atlas of Genomic Profiles of Steroid Action	5 years	347	120	49	29	2
BARTHA MARIA KNOPPERS - MCGILL Genomics in Society: Responsibilities and Rights	4 years	38	20	83	153	0
FATHEY SARHAN - UQAM Functional Genomics of Abiotic Stress in Crops	4 years	82	28	11	17	0
THOMAS J. HUDSON - MCGILL Regulatory Genetics: Identification of Regulatory Polymorphisms in the Human Genome	4 years	117	27	16	51	6
RAFICK-PIERRE SÉKALY - UMONTRÉAL Functional Genomics, Pharmacogenomics and Proteomics of the Immune Response in Health and Immune Related Disorders	4 years	194	79	17	150	6
MARIO FILION - MCGILL Integrative Genomics for Women's Health Program	3 years	36	5	1	10	4
SHERIF ABOU ELELA - USHERBROOKE High-throughput Functional Genomics Using Modified Nucleic Acid (MoNA) Technologies	3 years	51	8	6	9	2
ADRIAN TSANG - UCONCORDIA Genomic Approach to Identify Fungal Enzymes for Industrial Processes and Environmental Remediation	3 years	167	69	16	22	8

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
COMPETITIONS I & II, HEALTH (CONT'D)						
BENOIT COULOMBE - UMONTRÉAL Regulatory Networks in Gene Expression: From the Genome to the Organism	3.5 years	189	63	15	111	0
JOHN MACKAY - ULAVAL Functional Genomics of Regulation in Forest Trees	3.5 years	98	31	23	63	2
THOMAS J. HUDSON - MCGILL A Haplotype Map of the Human Genome - Biomedical Tool for Genetic Research in Canada	3 years	34	2	14	87	1
EMIL SKAMENE - MCGILL Genetic Dissection of Complex Traits Using Phenotypic and Expression Analysis of Recombinant Congenic Mouse Strains	4.25 years	60	13	2	11	3
GUY A. ROULEAU - UMONTRÉAL High Throughput Mutation Screening of Ion Channel Genes in Familial Neurological Disorders	4.25 years	40	5	0	16	3
TERRY ROEMER - PRIVATE Genome wide Essential Gene Identification in Candida albicans and Applications to Antifungal Drug Discovery	3 years	51	0	2	3	3
BARRY POSNER - MCGILL **ROB SLADEK - MCGILL** Genetics of Type 2 Diabetes Mellitus	5.5 years	91	23	25	35	6
COMPETITION III, INTERNATIONAL CONSORTIUM INITIATIVE, PRIVAC, TECHNOLOGY DEVELOPMENT						
SHERIF ABOU ELELA - USHERBROOKE Functional Annotation of Essential Alternatively Spliced Isoforms	5.25 years	101.5	10.8	11	28	3
KEN DEWAR - MCGILL An Integrated Genetic/Physical Genome Map for the Old World Monkey, Cercopithecus Aethiops	4.75 years	18.3	2	3	4	0
TOMI M. PASTINEN - MCGILL GThe GRID Project: Gene Regulators in Disease	4.5 years	213	51.5	84	42	2
GUY A. ROULEAU - UMONTRÉAL Identification and Characterization of Genes Involved in Common Developmental Brain Diseases	5 years	86	12	14	41	1

ASSESSMENT OF COMPLETED PROJECTS (CONT'D)

FOR 2017-2018	Duration of the project	Number of persons employed (pers. - years)	Number of scientists trained (pers. - years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
COMPETITION III, INTERNATIONAL CONSORTIUM INITIATIVE, PRIVAC, TECHNOLOGY DEVELOPMENT (CONT'D)						
JEAN-CLAUDE TARDIF - MHI Pharmacogenomics (cardiovascular disease)	4 years	346	41	15	87	0
JOHN MACKAY - ULAVAL Arborea II: Genomics for Molecular Breeding in Softwood trees. Discovery of Gene Markers to Enhance the Productivity and Value of Spruce through Integrated Functional Genomics and Association Mapping	5 years	186	66.6	49	95	0
BARTHA MARIA KNOPPERS - MCGILL **THOMAS J. HUDSON - MCGILL** Public Population Project in Genomics-CARTaGENE (P³G-CaG)	3 years	33.5	57	35	54	0
DANIEL LAMARRE - IRIC **SYLVAIN MELOCHE - IRIC** A genomic platform for RNA interference screening to identify signalling pathways involved in cancer	2 years	16.8	0	0	3	0
RAFICK-PIERRE SÉKALY - UMONTRÉAL Genomics and proteomics platforms for vaccines and immune therapeutics discovery and development	2 years	18	3	4	5	2
MICHEL G. BERGERON - CHU DE QUÉBEC Genomic Point of Care testing (GPOCT) Viral Respiratory tract Infections (VRTIs)	2.25 years	45	2	9	18	1
MICHAEL PHILLIPS - MHI **JEAN-CLAUDE TARDIF - MHI** Genomics and proteomics platforms for vaccines and immune therapeutics discovery and development	2.5 years	17.5	3.6	4	44	0
MARYAM TABRIZIAN - MCGILL Integrated Proteomics Platforms for High-Throughput Biomarker Discovery and Validation	2 years	35.3	15.2	34	13	0
RAFICK-PIERRE SÉKALY - UMONTRÉAL - BCCA **RYAN BRINKMAN - UMONTRÉAL - BCCA** High Throughput High-Dimensional Multi-Parametric Analysis of the Immune System	2 years	6	1	2	4	0
BARTHA MARIA KNOPPERS - MCGILL Genomics and Public Health (GPH): Building Public "Goods"?	3 years	5	4	22	47	0
TOTAL COMPLETED PROJECTS		**4,835**	**1,165**	**1,738**	**2,478**	**158**

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