ANNUAL REPORT

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GenomeQuébec

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MESSAGE FROM THE CHAIR OF THE BOARD

Genomics makes it possible to innovate, catalyze discoveries and find solutions to many of society's issues in various areas, including health, agrifood, forestry and the environment. I sincerely believe in the potential of this disruptive, cross-disciplinary technology that bears great hope and will generate major projects for Québec.

For close to 20 years now, Génome Québec has played a leading role among genomics researchers, helping them to excel and reach the highest levels of accomplishment on the world stage. The efforts made by our organization to build this critical mass of expertise have paid off. Today, all Quebecers can be proud of the achievements of our very own genomics researchers, who are recognized worldwide for the quality of their work and the major breakthroughs made right here at home. The social and economic impact of the research funded by Génome Québec is significant and certainly worthy of note. Showcasing these results is one of our priorities. Another is ensuring the integration and appropriation of genomic technologies by potential end users – be they health professionals, patients, farmers or environmental experts, to name a few.

> The excellence of Québec's scientific talent is now undisputed. Our challenge at present is to train the next generation.

The excellence of Québec's scientific talent is now undisputed. Our challenge at present is to train the next generation. Similarly, the quality of the services offered by Génome Québec has earned an enviable reputation the world over. As such, our focus will be on initiatives that will prepare emerging scientists and on efforts that will contribute to maintaining, and even enhancing, the capacity of our technology platforms and their level of performance.

For all its benefits, genomics nevertheless prompts several questions and can even generate fear. A victim of its complexity, genomics raises legitimate ethical issues. Génome Québec stands out in this respect in that all projects it finances must include an ethical component. Ethics in and of itself is not an obstacle to progress. When issues are debated in an objective, transparent manner, ethics provides an opportunity to ensure the responsible implementation of new technologies, so that society may reap all the advantages generated by the breakthroughs.

If genomics is to reach its full potential, we will need to pursue and intensify our efforts in education and social acceptance. These are priorities I hold dear. Génome Québec has made them one of the main components of its 2018-2023 Strategic Plan and I could not be more pleased. We must seize every opportunity to showcase the major accomplishments related to genomics. The public will form its own opinion through real stories backed by credible evidence. The message still needs to reach the public arena, but we have all the necessary assets at our disposal to share this amazing knowledge with our fellow citizens.

I agreed to take on the challenge of chairing the Génome Québec Board because I am extremely proud of the essential, in fact, indispensable role this major organization plays in Québec society. I would like to take a moment to commend the vision and professionalism of our President and CEO, Daniel Coderre, and his management team, along with the outstanding work accomplished by every Génome Québec employee.

In closing, I wish to thank my fellow board members for their valuable cooperation and their vote of confidence. I would also like to thank Martin Godbout, the outgoing Chair of the Génome Québec Board, for his inspiration and vision, and for the energy he has invested over the past eight years.

I wish you all an excellent 2019–2020, which promises to be busy, yet extremely invigorating!

ANIE PERRAULT

MESSAGE FROM THE PRESIDENT AND CEO

Genomics, a transformative technology, will be playing a leading role in the economy of the 21st century and will provide actionable solutions to some of the world's most pressing problems. However, our capacity to contribute to the development and competitiveness of genomics research in Québec requires ongoing investment in basic and applied research and in world-class infrastructure.

The year 2018 marked the arrival of a new government which, in its first budget, clearly demonstrated its support for this thriving disruptive technology. Génome Québec received $7.5 million to finance its operational needs, fund its research platforms and co-fund genomics research activities.

I would like to commend the government's decision for this mark of recognition and this much-needed investment. If we are to pursue the development of this bustling sector, we need the stable and ongoing support of the government to complete our 2018-2023 Strategic Plan. For this reason, we presented policymakers with a pre-budget brief featuring a list of recommendations. The purpose of the brief was to fast-track development of genomics activities, prioritize sectors based on Québec's needs and promote advances in research, its related applications and its social and economic impact.

In terms of research activities, the success of Québec researchers in Genome Canada competitions has exceeded the year's objectives: the overall success rate in all competitions was 28% of Genome Canada's total funding, despite growing competition from other regional genomics centres.

As with other disruptive technologies, genomics is revolutionizing the way we do things, and this has the potential to raise concerns among the public. In response, we needed to gain more insight into possible reservations the public may have and gauge their level of concern. We did this by conducting consultations among citizens and experts across Québec. The exercise is allowing us to prioritize our initiatives and respond as objectively as possible to the questions Quebecers may have.

STRATEGIC RECRUITMENT IN 2019

In December 2018, we hired a new Vice President of Scientific Affairs, Serge Marchand, who has an impressive track record. He has been tasked with developing initiatives to meet the needs of our strategic sectors and empower cooperation among researchers and users from related fields to capitalize on the full potential of applied genomics.

In March, we appointed Anie Perrault as Chair of the Génome Québec Board of Directors, the first woman in our history to hold the position. A lawyer by trade and a proficient administrator, Ms. Perrault has extensive experience in the research and innovation sector and has acquired a solid understanding of genomics over the years.

I would like to take this opportunity to thank outgoing Chair, Martin Godbout for close to eight years of service at the helm of our Board. Génome Québec was fortunate to be able to count on his rich expertise in genomics for so many years.

I would be remiss not to acknowledge the exceptional contribution of our employees, whose excellence and commitment to Génome Québec have made possible the achievement of our corporate objectives. Their talent and expertise form the cornerstone of our success.

Lastly, I would also like to extend my sincere thanks to our Board of Directors for their assistance in making genomics one of our greatest sources of pride both here at home and around the world.

DANIEL CODERRE

ABOUT

OUR MISSION

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.

OUR VISION

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

2018-2019 HIGHLIGHTS

BUDGET

Brief submitted
to the Québec ministère
des Finances as
part of the pre-budget consultations

Funding of $7.5 million
secured in the first budget by
the Legault Government in support
of Génome Québec operations and
innovative research in genomics

GOVERNANCE

Anie Perrault,
a lawyer by trade and
a seasoned administrator,
appointed as the new
Chair of the Génome Québec
Board of Directors

SCIENTIFIC AFFAIRS

Management of a portfolio of
56 active projects
in the strategic sectors of human health,
agrifood, forestry and the environment.

Serge Marchand, a heavyweight
of the Québec research community,
recruited as the new
Vice President, Scientific Affairs

Development of **promising partnerships**
in cancer research:

> Support of the Montreal Cancer Consortium, an initiative of the Terry Fox Research Institute aiming to improve cancer treatments for Québec patients.

> Support of the Oncopole Multidisciplinary Teams Against Cancer (EMC2), which brings together the expertise and strengths of the Québec oncology research community to tackle this public health challenge.

2018-2019 HIGHLIGHTS (CONT'D)

EDUCATION AND SOCIAL ACCEPTANCE

Launch of a **series of extensive public consultations** to better understand how Quebecers perceive genomics and develop an effective public education strategy.

Obtention of two certifications for the training program *Introduction à la génomique*, developed for health professionals:

> Centre for Continuing Education of the Faculty of Medicine and Health Sciences at the Université de Sherbrooke

> Ordre des pharmaciens du Québec

TECHNOLOGY CENTRES

Québec government announces the creation of the **Québec Centre for Clinical Genomics**

SCIENTIFIC OUTREACH

Genomics is a rapidly growing sector. Québec researchers, who are recognized worldwide for their expertise, are now poised to propose tangible solutions to meet the various collective challenges we face.

Capitalizing on its wide range of expertise and skills, the Scientific Affairs team, which I had the pleasure of joining in 2019, provides support to our researchers to help them bring to fruition their promising projects.

In 2018-2019, our team ensured the follow-up of a portfolio of 81 active projects, 56 of which were still active on March 31st. This included the management of research oversight committees with more than 80 international experts. Relying on this critical support, Québec researchers were able to perform extremely well in many national competitions spearheaded by Genome Canada and obtain substantial funding.

SERGE MARCHAND
Vice President, Scientific Affairs

QUÉBEC RESEARCHERS LEADING THE WAY

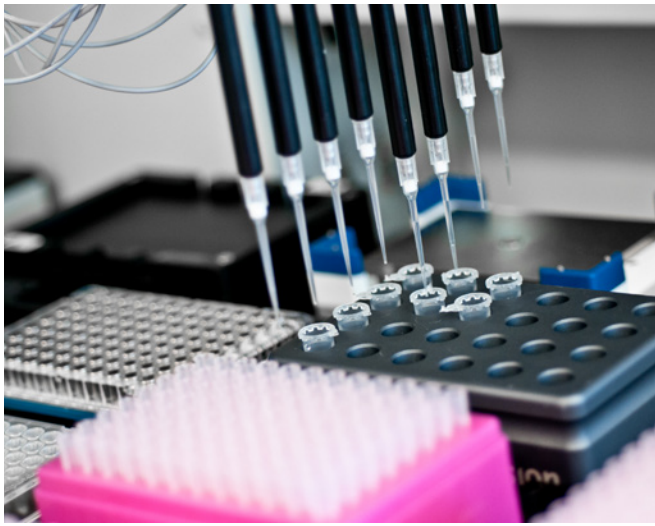
The fast-paced progress of research conducted by **Professor Jacques Simard**, holder of the Canada Research Chair in Oncogenetics, Faculty of Medicine at Université Laval, and researcher at the Research Centre of the CHU de Québec, has led to the publication of two major studies. Through a simple saliva test, these findings could help to assess, more accurately than ever before, a woman's risk of developing breast cancer during her life.

Read the article >

In 2018, the Québec government announced its plan to improve the Trisomy 21 Prenatal Screening Program of Québec by implementing a second-line non-invasive prenatal genomic test. The decision was based on the work of **Dr. François Rousseau** and his team at the Research Centre of the CHU de Québec-Université Laval and could lead to a reduction of more than 90% in the number of amniocenteses performed in Québec.

Read the article >

SCIENTIFIC OUTREACH (CONT'D)



INTEGRATING GENOMICS SOLUTIONS INTO THE QUÉBEC HEALTH SYSTEM

In April 2018, an investment of more than $58 million for the development of precision medicine in Québec was announced as part of the Genome Canada *Genomics and Precision Health* competition. The projects selected will enable the clinical application of major discoveries in the fight against breast cancer, pediatric brain cancer and acute myeloid leukemia, and in the screening of fetal genetic abnormalities.

Thanks to their highly innovative projects and with the support of our team, Québec researchers also excelled in the last cycles of the *Genomic Applications Partnership Program* and the *Disruptive Innovation in Genomics* competition, securing major funding for the development of diagnostic tools and targeted treatments.

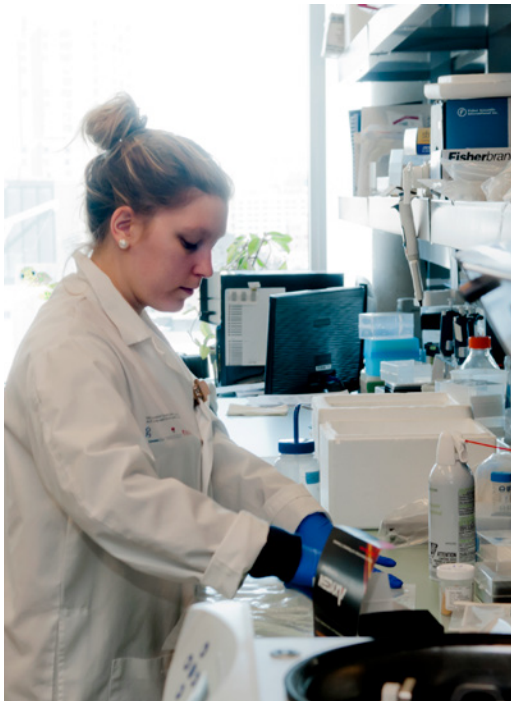
GENOMICS IN THE AGE OF BIOINFORMATICS AND ARTIFICIAL INTELLIGENCE

In recent years, research in bioinformatics and artificial intelligence has advanced by leaps and bounds here in Québec. A growing number of Québec researchers are now capitalizing on these technologies to bring to reality the promises offered by the phenomenal amount of genomics data available. As evidence of this trend, nine Québec projects overseen by our team – several of which were spearheaded by emerging researchers – were selected this year under the Genome Canada *Bioinformatics and Computational Biology* competition. Together, these projects secured 31.48% of the federal funding available for an overall investment of $7.5 million in the development of this cutting-edge field in Québec.

NEW PROJECT FUNDING IN 2018-2019

Total project budget	$24.9 M
Number of teams supported	44
Number of projects funded	16
Genome Canada funding awarded in Québec	$9.4 M
Genome Canada funding awarded in the rest of Canada	$33.9 M
Annual success rate of Genome Canada's funding in Québec	27.8%
Number of active projects in the portfolio	**56**

SCIENTIFIC OUTREACH (CONT'D)



STRATEGIC PARTNERSHIPS IN SUPPORT OF PATIENTS

In keeping with Génome Québec's strategic objectives, the Scientific Affairs team has joined forces with key actors of the health and life science sector, working with them on various large-scale projects.

As one example, we have invested $2 million in the EMC2 initiative of the Oncopole, which brings together the expertise and strengths of the Québec oncology research community to tackle this public health challenge. Seven projects selected during the first competition will undoubtedly produce major breakthroughs in oncology.

We are also proud to support the Montreal Cancer Consortium (MCC), an initiative of the Terry Fox Research Institute. This project aims to improve treatments offered to Québec patients by facilitating, among other things, the integration of genomic data into the clinical setting and the introduction of genomic medicine. More specifically, our team is supporting the genomics research component of MCC's various projects.

LOOKING TOWARDS THE FUTURE

In the coming year, our team will be working closely with government, industry and academia on developing new initiatives in the strategic sectors of precision health, agrifood, forestry and the environment with a constant focus on creating wealth in Québec.

Moreover, given that interdisciplinary cooperation is a must when it comes to maximizing the full potential of genomics research, we will also be connecting with researchers and users from related fields, such as artificial intelligence, medical imaging, biomarkers, synthetic biology and microbiota.

SERGE MARCHAND
Vice President, Scientific Affairs

TECHNOLOGICAL OUTREACH

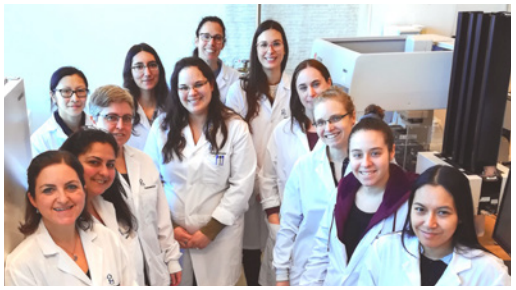
Our technology platforms leverage a highly skilled and seasoned staff, outstanding client service and cutting-edge infrastructure.

By drawing on these tremendous strengths, we can offer fast, reliable comprehensive services to researchers both at home and abroad and to businesses working in key sectors such as human and animal health, the environment and agrifood.

Our services, which range from genotyping and biobanking to gene sequencing, gene expression, epigenomics and bioinformatics, 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 Proteomic and Chemogenomic Analyses (CAPCA).



Members of the McGill University and Génome Québec Innovation Centre team celebrating International Women's Day

DANIEL TESSIER
Vice President, Technology Centres

HIGH-PERFORMANCE CENTRES

In the past year, the Innovation Centre experienced a marked increase in its activities, completing projects for a record number of 1,013 research teams from 25 countries. This generated revenues of more than $13.5 million – with 11% coming from international clients. Moreover, a survey found an overall user satisfaction rate of 96%, once again confirming the level of excellence of our services.

As part of the platform's development strategy, the Biobank carried out more than 2,000 DNA extractions on CARTaGENE samples.

TECHNOLOGICAL OUTREACH (CONT'D)

INTERNATIONAL DEVELOPMENT

This year, in addition to our regular activities, we also focused on participating in various international events and meetings to increase the visibility of our technology centres and diversify our client base. These initiatives resulted in partnership agreements with France (France Genomic Medicine 2025) and the United Kingdom (Genomics England), among others.

Daniel Tessier, Vice President, Génome Québec Technology Centres, at a presentation at Canada House in London during Genesis 2018.

MAJOR MILESTONE REACHED IN BRINGING GENOMICS TO THE CLINIC

Lastly, we are pleased to report that in August 2018, the Québec government announced the creation of the Centre québécois de génomique clinique. Its mandate is to meet the needs of the health network for molecular diagnoses and genomics medicine, more specifically in rare disease diagnosis and oncology. Thanks to its recognized expertise in high-throughput sequencing, Génome Québec will be assisting the ministère de la Santé et des Services Sociaux in implementing the platform, which will be located at the CHU Sainte-Justine Integrated Centre for Pediatric Clinical Genomics.

The announcement marks a critical step in bringing genomics into the clinical setting. Our teams will be hard at work in the coming months to prepare this major transition for the Québec health system.

DANIEL TESSIER
Vice President, Technology Centres

STRATEGIC DEVELOPMENT AND PUBLIC OUTREACH

Genomics, a promising transformative technology, tends to ignite passionate public debate. Yet its tremendous potential in various areas of society and the rules governing its implementation remain widely unknown. It is safe to say, however, that the societal shift driven by the genomics revolution can only be achieved with the support of the public.

High school students and their teacher introduced to genomics thanks to Flight450 Minilab.

In this light, it seems crucial to gain a clear understanding of public perceptions in order to inform, reassure, educate, train and mobilize stakeholders. This is why we have set out to provide users, policymakers and citizens with credible and reliable information they can use to form their own opinions and support sound decision making.

In response to this challenge, we have launched different initiatives targeting three key audiences: high school students and their science and technology teachers (Education component), health professionals (Health component) and the public (Social Acceptance component).

THE VITAL ROLE OF EDUCATING YOUNG PEOPLE

We believe that it is crucial to start by educating young people, who are learning about science today to become the researchers, workers, citizens and decision makers of tomorrow. In the past year, we have stepped up our educational activities to enhance student learning on genetics and genomics.

For instance, we have developed an online platform where high school teachers can access reliable, compelling teaching aids to present these topics to students. Thanks to its relevant content and effective promotional strategy, the platform was extremely well received by the educational community and reached an impressive level of traffic. Since its launch in April 2018, some 35,000 pages have been viewed by over 15,000 unique visitors.

MARIE-KYM BRISSON
Vice President, Strategic Development and Public Affairs

In addition, the success of the Flight450 Minilab led us to produce a third kit to meet the demand of English-language schools. This activity, which gives students in Secondary 3 to 5 the chance to manipulate real DNA, has continued to gain exceptional momentum since its launch 3 years ago. During the 2018-2019 academic year, some 2,200 students in 28 schools across the province were initiated to genomics.

A brief history of the discovery of DNA.
View the capsule >

STRATEGIC DEVELOPMENT AND PUBLIC OUTREACH (CONT'D)

SPECIALIZED TRAINING FOR QUÉBEC HEALTH PROFESSIONALS

Genomics is radically transforming health care practices. Accordingly, it is essential for health professionals to have the tools they need as we step forward into the era of genomic medicine.

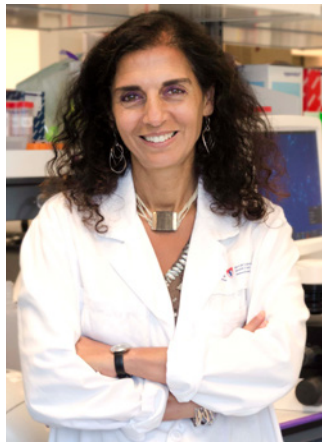
To this end, in October 2018, working in partnership with the Quebec Network for Personalized Health Care, we launched a specialized French-language training program presenting the fundamentals of genomics and genomic medicine.

The new interactive and dynamic online program is accredited by the Centre for Continuing Education of the Faculty of Medicine and Health Sciences at the Université de Sherbrooke and by the Ordre des pharmaciens du Québec. The program is also available on Environnement numérique d'apprentissage, a shared professional development platform for members of the health and social services network in Québec.

SCIENTIFIC OUTREACH

To promote the exceptional work of our researchers, we helped them attract media coverage and produced many scientific outreach tools. We presented major breakthroughs, including those of Dr. Nada Jabado (brain cancer in children) and Dr. Guy Sauvageau (acute myeloid leukemia), that will soon be integrated into our health care system. In addition, we presented information that demystifies advances in genomics made in the sectors of agrifood (soybean crops, salmonella screening) and the environment (caribou monitoring, water quality, etc.).

View all our capsules >



Dr. Nada Jabado, pediatric hemato-oncologist at the Montreal Children's Hospital of the McGill University Health Centre

Demystifying pediatric brain cancer >

Dr. Guy Sauvageau, lead investigator, Molecular Genetics of Stem Cells Research Unit, Institute for Research in Immunology and Cancer of Université de Montréal

New weapons to fight bone marrow cancer >

STRATEGIC DEVELOPMENT AND PUBLIC OUTREACH (CONT'D)

INCREASE SUBSCRIBERS ON SOCIAL MEDIA

+11 %	+23 %	+27 %	+227 %
3,939	2,831	2,177	200

Participatory conference Ready for Genomics?

GAUGING PUBLIC OPINION

In 2018-2019, we launched a series of extensive public consultations to better understand the perceptions and concerns of Quebecers regarding the impact of genomics on health care.

Our first initiative was to task Pôle santé HEC Montréal with assessing the current situation. The team conducted twelve focus groups in six regions of Québec and produced a report on their findings. This study, whose results were validated by a group of experts from various fields (communications, science, health, education, etc.), confirmed the public's low level of knowledge about genomic medicine and documented many fears and preconceived ideas. It was noted that after being given basic information about genomics, participants were open and interested in discussing the issue and learning more.

Our public consultation exercise culminated in the participatory conference *Ready for Genomics?* held on March 20, 2019. Expertly hosted by Stephan Bureau, the event brought together keynote speakers specialized in a wide range of areas including genomics, ethics, communications, health, education and politics. Lively debates with participants followed each of the rich presentations, making this day a stimulating collective reflection.

Using the information gathered through these activities, we will be developing a vast public education strategy to support enlightened choices and informed decision making on the adoption of genomic technology in health.

Signing of an international partnership between Génome Québec, Université Jean Monnet de Saint-Étienne–Université de Lyon and Cancéropôle Lyon Auvergne-Rhône-Alpes.

GOVERNMENT PRESENTATIONS AND INTERNATIONAL IMPACT

As part of pre-budget consultations, Génome Québec submitted a brief to the Québec ministère des Finances. With a focus on wealth creation and economic development, the document aligned with our 2018-2023 Strategic Plan and featured five recommendations, including the strengthening of our education mandate.

Our strategy has also sparked great interest in the French-speaking world. In this regard, we have signed a tripartite international partnership with the Université Jean Monnet de Saint-Étienne–Université de Lyon and the Cancéropôle Lyon Auvergne-Rhône-Alpes. The aim of this agreement is to develop public education activities in Francophone countries and put genomics to work for the benefit of citizens and society.

MARIE-KYM BRISSON
Vice President, Strategic Development and Public Affairs

GÉNOME

FINANCIAL ACTIVITY REPORT

QUÉBEC

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, 2019, our research portfolio included 56 research projects, and three technology centres are currently in operation. Génome Québec invested $45.5 million during the 2018-2019 fiscal year. This amount, combined with the $21.9 million invested by other partners, brings our overall injection of funds to $67.4 million.

Business volume generated by research projects during the fiscal year amounted to $45.4 million. The most important activities were from the *Fonds de partenariat pour un Québec innovant et en santé* and the *Genomic Applications Partnership Program*. This year, new projects were also launched as part of various competitions including *Genomics and Precision Health, Bioinformatics and Computational Biology*, and *Disruptive Innovation in Genomics* and under partnerships with the Oncopole and the Terry Fox Foundation. The budget for projects underway totalled $388 million, $93 million of which are still to be carried out.

For the year ending on March 31, 2019, sales from the technology centres totalled $13.9 million, a slight increase compared to last year. The technology centres posted an excess of revenues over expenses of $462,274 compared to $805,983 during the previous year.

General and administrative expenses and business development and communication costs amounted to $2.6 million this year, down by $81,213 compared to last year. Strategic development costs totalled $248,780. After certain adjustments, these expenses represented 3.9% of the year's overall investment. Investment and intellectual property revenues reached $1,047,923, for a return of 1.99%.

The excess of revenues over expenses totalling $999,525 is the combined effect of the surplus of $462,274 generated by the technology centres, the investment and intellectual property revenues of $1,047,923, minus activities carried out without government funding, that is strategic development of $248,780 and support to researchers of $261,892. Unrestricted net assets increased by $545,567, reaching a total of $3 million on March 31, 2018. Net restricted assets dedicated to research projects totalled $657,409. The technology investment and contingency fund net assets totalled $1,378,169.

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, 2019, WITH COMPARATIVE INFORMATION FOR 2018

The following Statement of Financial Position as at March 31, 2019 and 2018, and the Statement of Operations for the years ending March 31, 2019 and 2018 are provided as illustrative summaries only and are not intended to replace the full audited financial statements of Génome Québec. The full financial statements of Génome Québec were audited by KPMG LLP, Chartered Professional Accountants, and reported on June 20, 2019.

ASSETS

	2019 ($)	2018 ($)
Current Assets		
Cash and cash equivalents	13,306,083	4,504,807
Short-term investments	29,061,925	20,446,553
Contributions receivable	3,233,115	3,161,000
Accounts receivable and work in progress	2,849,209	2,767,582
Advances to genomics research	3,599,723	-
Inventories	2,449,046	1,430,704
Prepaid expenses	173,538	163,212
	$54,672,639	**$32,473,858**
Long-term investments	8,074,488	28,099,774
Capital assets	541,520	251,769
	$63,288,647	**$60,825,401**

STATEMENT OF FINANCIAL POSITION MARCH 31, 2019, WITH COMPARATIVE INFORMATION FOR 2018 (CONT'D)

LIABILITIES AND NET ASSETS

	2019 ($)	2018 ($)
Current liabilities		
Accounts payable and accrued liabilities	4,317,560	2,927,043
Amounts due to research projects	–	505,261
Obligations from an agreement	578,169	–
Deferred revenues	384,197	461,841
	$5,279,926	**$3,894,145**
Deferred contributions		
Future expenses	52,462,415	52,016,323
Capital assets	455,811	245,794
	$58,198,152	**$56,156,262**
Net assets		
Unrestricted	2,969,210	2,423,643
Restricted – Invested in capital assets	85,707	5,975
Restricted – Technology investment and contingency funds	1,378,169	1,577,133
Restricted – Research projects	657,409	662,388
	$5,090,495	**$4,669,139**
	$63,288,647	**$60,825,401**

STATEMENT OF OPERATIONS YEAR ENDED MARCH 31, 2019, WITH COMPARATIVE INFORMATION FOR 2018

	2019 ($)	2018 ($)
Revenues		
Amortization of deferred contributions related to future expenses	30,716,411	40,828,880
Amortization of deferred contributions related to capital assets	156,078	195,660
Investment and intellectual property revenues	1,047,923	657,695
Revenues from technology centres	13,884,484	13,875,705
Other revenues	485,187	496,856
	$46,290,083	**$56,054,796**
Expenses		
Genomics research projects	18,379,761	20,376,541
Research projects, *Fonds de partenariat pour un Québec innovant et en santé*	5,176,229	13,039,470
Technology centres operational costs	18,707,271	18,371,978
General and administrative expensess	2,385,352	2,431,218
General and administrative expenses, *Fonds de partenariat pour un Québec innovant et en santé*	131,294	127,376
Business development and communications	88,844	128,109
Strategic development	248,780	222,157
Depreciation of capital assets	156,078	195,660
Depreciation of restricted capital assets	16,949	12,965
	$45,290,558	**$54,905,474**
EXCESS OF REVENUES OVER EXPENSES	**$999,525**	**$1,149,322**

BOARD OF DIRECTORS AND COMMITTEES

BOARD OF DIRECTORS

Anie Perrault, LL.L., ASC
Chair of the Board
Executive Manager, BIOQuébec

François R. Roy
Vice Chairman of the Board
Corporate Director

Jean Brunet, ATTORNEY
Secretary of the Board
Managing Partner, Stein Monast L.L.P.

MEMBERS OF THE BOARD

Isabelle Bouffard, BSc
Director, Direction recherches et politiques agricoles, Union des producteurs agricoles

Alain Bourque, MSc
CEO, Ouranos

Daniel Coderre, PhD
President and CEO, Génome Québec

Hélène Desmarais, C.M., LL.D.
CEO and Chair of the Board of Administration, Centre d'entreprises et d'innovation de Montréal

Jean-François Éthier, MD, CM, PhD, FRCPC
Clinical Researcher and Assistant Professor, Department of medicine, Université de Sherbrooke

Sylvain Moineau, O.C., PhD, FRSC
Full Professor, Département de biochimie, de microbiologie et de bio-informatique, Université Laval

Marie-Lucie Morin

David Jarry, MSc., LL.M.
Partner, MNP

Paul Lepage, B.Eng., MBA, Dr. h.c.
President and CEO, Intelerad Medical Systems

Rémi Quirion, PhD, CQ, O.C., FRSC
Chief Scientist of Québec, Fonds de recherche du Québec

Jennifer Stoddart, O.C., Ad. É.
Invited Scholar, Centre of Genomics and Policy, McGill University

Suzanne Vinet

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GÉNOME

LARGE-SCALE PROJECT OUTCOMES

QUÉBEC

LARGE-SCALE PROJECT OUTCOMES

GENOMIC APPLICATIONS PARTNERSHIP PROGRAM (GAPP)

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
JEAN BOUSQUET - ULAVAL *FastTRAC* (Fast tests for rating and amelioration of conifers)	2015-04	9.59	0.21	4	1	0
MICHEL G. BERGERON - CHU DE QUÉBEC New test to rapidly diagnose infections	2015-10	Closing project: data available in July 2019				
CHRISTOPH BORCHERS - JEWISH GENERAL HOSPITAL New test for patient selection for cancer treatment	2016-04	6.95	3.00	3	22	0
PIERRE THIBAULT - UMONTRÉAL Mass spectrometry improvement for personalized medicine	2016-10	3.59	1.00	9	22	0
CLAUDE ROBERT - ULAVAL Improve swine genetics	2016-10	9.20	0.57	0	2	0
ADRIAN TSANG - CONCORDIA Lysozyme feed additives to improve gut health and productivity of food animals	2017-10	7.47	0	0	0	0
PAUL GOODYER - MUHC RESEARCH INSTITUTE Novel Aminoglycoside Readthrough Therapy for Nonsense Mutations	2018-04	5.51	0.21	0	1	0
CLAUDE ROBERT - ULAVAL Use of genomics to manage and protect caribou populations	2018-04	6.83	1.30	0	0	0
RÉGEN DROUIN - ULAVAL Development of Comprehensive Cytogenomics and Molecular Genetics Testing Using an Exome and Low-Pass Whole Genome Sequencing Combined Approachr	2018-10	Data available in July 2019				
TOTAL		**49.14**	**6.29**	**16**	**48**	**0**

LARGE-SCALE PROJECT OUTCOMES

2017 COMPETITION: DISRUPTIVE INNOVATION IN GENOMICS - PROJECTS MOVING FROM PHASE 1 TO PHASE 2

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
DAVID JUNCKER - MCGILL Digital Omics of Single Exosomes	2018-10	2.72	1.50	0	1	0
ÉRIC LÉCUYER - IRCM The RNA Zipcode Discovery Pipeline: Emerging tools for therapeutic targeting at subcellular resolution	2018-10	2.17	0.67	0	0	0
TOTAL		**4.89**	**2.17**	**0**	**1**	**0**

GENOMICS TECHNOLOGY PLATFORMS

GUILLAUME BOURQUE - MCGILL Canadian Centre for Computational Genomic (C3G)	2017-04	17.85	0	34	16	0
MARK LATHROP - MCGILL McGill University and Génome Québec Innovation Centre	2017-04	48.62	0	145	11	0
PIERRE THIBAULT - UMONTRÉAL Centre for Advanced Proteomic and Chemogenomic Analyses	2017-04	12.49	0.67	15	17	1
TOTAL		**78.96**	**0.67**	**194**	**44**	**1**

LARGE-SCALE PROJECT OUTCOMES

2017 BIOINFORMATICS AND COMPUTATIONAL BIOLOGY (B/CB) COMPETITION

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
ABDOULAYE BANIRÉ DIALLO - UQAM Bioinformatics and Artificial Intelligence to leverage predictive models of dairy production	2018-10	5.27	1.57	0	2	0
MATHIEU BLANCHETTE - MCGILL Bioinformatics tools for integrative 3D epigenomics	2018-10	4.09	3.24	2	0	0
GUILLAUME BOURQUE - MCGILL Epigenomics Secure Data Sharing Platform for Integrative Analyses (EpiShare)	2018-10	0.65	0	0	4	0
GREGORY BUTLER - CONCORDIA TooT Suite: Prediction and classification of membrane transport proteins	2018-10	3.03	1.99	0	0	0
CELIA GREENWOOD - MCGILL Precise Medicine in Cellular Epigenomics	2018-10	1.87	1.00	0	2	0
RAFAEL NAJMANOVICH - UMONTRÉAL Next-generation molecular docking leveraging artificial intelligence techniques to understand large-scale ligand binding data sets	2018-10	2.27	1.23	0	0	0
JIANGUO XIA - MCGILL Development and validation of a web-based platform for environmental omics and toxicology	2018-10	0.81	0.06	0	0	0
JIANGUO XIA - MCGILL An integrative platform for metabolomics and systems biology	2018-10	0.63	0.21	0	0	0
LEONID CHINDELEVITCH - UBC **JESSE SHAPIRO - UMONTRÉAL** Machine learning methods to predict drug resistance in pathogenic bacteria	2018-10	Data available in September 2019				
TOTAL		**18.62**	**9.29**	**2**	**8**	**0**

LARGE-SCALE PROJECT OUTCOMES

2017 COMPETITION: GENOMICS AND PRECISION HEALTH

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-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	24.99	8.13	6	24	0
FRANÇOIS ROUSSEAU - ULAVAL PÉGASE-2: Personalized Genomics for Prenatal Abnormalities Screening Using Maternal Blood: Towards first-tier screening and beyond	2018-04	15.16	4.87	6	1	0
GUY SAUVAGEAU - UMONTRÉAL Interrogating and implementing Omics for precision medicine in acute myeloid leukemia	2018-04	23.39	5.10	4	11	0
JACQUES SIMARD - ULAVAL Personalized risk assessment for prevention and early detection of breast cancer: Integration and Implementation	2018-04	18.41	0	9	13	0
ALISON M. ELLIOTT - UBC **BARTHA MARIA KNOPPERS - MCGILL** GenCOUNSEL: Optimization of genetic counselling for clinical implementation of genome-wide sequencing	2018-04	0.63	0	0	5	0
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	0.43	0	7	12	0
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	4.26	0	1	2	0
FELIX RATJEN - SICK KIDS **BARTHA MARIA KNOPPERS - MCGILL** Personalized therapy for individuals with cystic fibrosis	2018-04	2.38	0	7	18	0
TOTAL		**89.64**	**18.10**	**40**	**86**	**0**

LARGE-SCALE PROJECT OUTCOMES

2015 COMPETITION: NATURAL RESOURCES AND THE ENVIRONMENT- SECTOR CHALLENGES - GENOMIC SOLUTIONS

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
NILADRI BASU - MCGILL Development of a toxicogenomics analysis tool	2016-10	23.52	9.29	1	5	0
SÉBASTIEN SAUVÉ - UMONTRÉAL Algal blooms, treatment, risk assessment, prediction and prevention through genomics	2016-10	48.06	19.22	12	5	0
SALLY AITKEN - UCOLOMBIE-BRITANNIQUE **RICHARD HAMELIN - ULAVAL** CoAdapTree (healthy trees for future climates)	2016-10	2.33	1.17	0	0	0
JÖRG BOHLMANN - UBC **JEAN BOUSQUET - ULAVAL** Spruce Up (advanced spruce genomics)	2016-10	18.00	5.11	15	11	0
RICHARD HAMELIN - UBC **ILGA PORTH - ULAVAL** BioSAFE (biosurveillance of alien forest enemies)	2016-10	15.70	6.00	11	30	0
CASEY HUBERT - UCALGARY **CHARLES GREER - MCGILL** Microbial genomics for oil spill preparedness in Canada's Arctic marine environment	2016-10	2.10	0	0	0	0
EMMA MASTER - UTORONTO **ADRIAN TSANG - CONCORDIA** SYNBIOMICS (advanced biopolymer synthesis)	2017-01	18.30	0	0	0	0
LESLEY WARREN - UTORONTO **CHRISTIAN BARON - UMONTRÉAL** Next generation biological treatment of mining waste-waters	2016-10	0.90	0	0	0	0
TOTAL		**128.91**	**40.79**	**39**	**51**	**0**

LARGE-SCALE PROJECT OUTCOMES

2014 GENOMICS AND FEEDING THE FUTURE COMPETITION

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
FRANÇOIS BELZILE - ULAVAL Improving yield and disease resistance in short-season soybean (SoyaGen)	2015-10	29.03	10.52	6	9	1
LAWRENCE GOODRIDGE - MCGILL **ROGER C. LEVESQUE - ULAVAL** Ensure food safety and reduce the economic burden of salmonellosis	2015-10	25.39	6.07	6	2	0
WILLIAM S. DAVIDSON - UBC **LOUIS BERNATCHEZ - ULAVAL** Enhancing production in Coho: culture, community, catch (EPIC4)	2015-10	7.63	0	2	6	0
LEONARD FOSTER - UBC **NICOLAS DEROME - ULAVAL** Sustaining and securing Canada's honey bees using 'omic' tools	2015-10	4.61	2.00	0	0	0
TOTAL		**66.66**	**18.59**	**14**	**17**	**1**

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	12.16	0.45	6	12	0
TOTAL		**12.16**	**0.45**	**6**	**12**	**0**

LARGE-SCALE PROJECT OUTCOMES

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

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
GERALD BATIST - JEWISH GENERAL HOSPITAL Personalized health care network Q-CROC	2014-04	37.68	0	0	8	0
NICOLA HAGEMEISTER - ÉTS Improve diagnosis and treatment for arthritis of the knee	2014-10	10.81	1.48	10	4	0
JEAN-CLAUDE TARDIF - MHI ARTERIA Program - Cardiovascular personalized diagnostics and therapies*	2014-04	13.69	1	4	7	0
BRIAN WARD - MUHC RESEARCH INSTITUTE Development of vaccines against pneumonia using plants	2014-04	11.83	3.91	7	6	0
TOTAL		**74**	**6.39**	**21**	**25**	**0**

**Data for 6 months only*

MARATHON OF HOPE CANCER CENTERS PROGRAM (IN PARTNERSHIP WITH THE TERRY FOX RESEARCH INSTITUTE)

IAN WATSON - MCGILL **JOHN STAGG - CHUM** Montreal Cancer Consortium (MCC)	2018-10	10.16	0,.62	0	4	0
TOTAL		**10.16**	**0.62**	**0**	**4**	**0**

LARGE-SCALE PROJECT OUTCOMES

2015 BIOINFORMATICS AND COMPUTATIONAL BIOLOGY COMPETITION

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
JESSE SHAPIRO - UMONTRÉAL Toolkit for genome-wide association studies in bacteria	2016-10	3.75	1	0	0	0
TOTAL		**3.75**	**1**	**0**	**0**	**0**

2012 GENOMICS AND PERSONALIZED HEALTH COMPETITION

CLAUDE PERREAULT - HÔPTAL MAISONNEUVE-ROSEMONT Personalized cancer immunotherapy	2013-04	7.81	1	0	2	0
TOTAL		**7.81**	**1**	**0**	**2**	**0**

LEVERAGED PROJECT OF THE QUÉBEC MARITIME NETWORK

LOUIS BERNATCHEZ - ULAVAL Genomics and epigenetics for the preservation of the St-Lawrence eel	2018-04	2.50	1	0	5	0
TOTAL		**2.50**	**1**	**0**	**5**	**0**

LARGE-SCALE PROJECT OUTCOMES

2015 DISRUPTIVE INNOVATION IN GENOMICS (DIG) COMPETITION (PHASE 2)

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
SACHDEV SIDHU - UTORONTO **EL BACHIR AFFAR - HÔPITAL MAISONNEUVE-ROSEMONT** Synthetic inhibitors of ubiquitin-binding cancer targets	2016-07	2.00	0	1	4	0
TOTAL		**2.00**	**0**	**1**	**4**	**0**

EMC^2 COMPETITION: MULTI-DISCIPLINARY TEAMS AGAINST CANCER (IN PARTNERSHIP WITH ONCOPOLE)

ANNE-MARIE MES-MASSON - CHUM Targeting genome instability as an essential vulnerability in ovarian cancer	2018-10	Data available in September 2019				
MORAG PARK - MCGILL Targetable vulnerabilities to overcome drug resistance in poor outcome breast cancers	2018-12					
BRIAN WILHELM - UMONTRÉAL Establishing a chemogenomic screening pipeline for high risk acute pediatric leukemias	2018-10					
TOTAL		–	–	–	–	–

TOTAL ONGOING PROJECTS	**549**	**106**	**333**	**307**	**2**

GÉNOME

ASSESSMENT OF COMPLETED PROJECTS

QUÉBEC

ASSESSMENT OF COMPLETED PROJECTS

GENOMIC APPLICATIONS PARTNERSHIP PROGRAM (GAPP)

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
CHARLES GOULET - ULAVAL A genetic toolbox for tomato flavour differentiation	3 years	12.03	8.00	0	0	1
RICHARD HAMELIN - UBC **ROGER C. LEVESQUE - ULAVAL** Next generation biosurveillance of invasive alien species	3.5 years	28.28	0	3	14	0
STEVE LABRIE - ULAVAL Metagenomics and cheesemaking technologies	4 years	8.90	0	0	4	0
ADRIAN TSANG - CONCORDIA Enzyme supplement for swine and poultry	4 years	81.07	0	0	0	0

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

MICHEL G. BERGERON - CHU DE QUÉBEC Rapid molecular diagnosis of infections (*C. difficile*, BMDR)	4.5 years	86.12	0.86	5	2	4
MICHEL BOUVIER - UMONTRÉAL Drug discovery	4.5 years	230.46	12.63	18	74	10

ASSESSMENT OF COMPLETED PROJECTS

2015 BIOINFORMATICS AND COMPUTATIONAL BIOLOGY COMPETITION

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-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	2 years	6.96	2.61	1	10	1
JÉRÔME WALDISPÜHL - MCGILL Identification of small RNA-binding molecules regulating gene expression	2.5 years	18.88	15.43	5	9	0
JÉRÔME WALDISPÜHL - MCGILL Crowdsourcing genomic databases	2 years	11.51	7.69	4	9	0

2015 DISRUPTIVE INNOVATION IN GENOMICS (DIG) COMPETITION (PHASE 1)

SANTIAGO COSTANTINO - HÔPITAL MAISONNEUVE-ROSEMONT Laser assisted single-cell genomics	2.5 years	10.96	6.83	4	17	2
DAVID JUNCKER - MCGILL Digital omics of single exosomes	2 years	12.12	7.81	0	1	0
ÉRIC LÉCUYER - IRCM RNA zipcode discovery pipeline	2 years	9.28	4.44	0	0	0
MARK TRIFIRO - JEWISH GENERAL HOSPITAL Rapid diagnostics through plasmonic PCR	2 years	9.84	6.35	2	2	4
MICHAEL TYERS - UMONTRÉAL Cell microfactory platform	2 years	3.55	0.36	0	3	0

ASSESSMENT OF COMPLETED PROJECTS

2012 GENOMICS AND PERSONALIZED HEALTH COMPETITION

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
PATRICK COSSETTE - CHUM Personalized medicine in the treatment of epilepsy	5 years	98.57	14.36	31	12	0
NADA JABADO - MUHC RESEARCH INSTITUTE Biomarkers for pediatric glioblastoma through genomics and epigenomics	5 years	83.97	38.42	31	91	0
JOHN D. RIOUX - MHI Inflammatory bowel diseases Genomic Medicine Consortium (iGenoMed)	5 years	107.09	7.52	7	35	1
FRANÇOIS ROUSSEAU - ULAVAL Personalized genomics for prenatal aneuploidy screening using maternal blood (PEGASUS)	5 years	118.00	19.19	42	98	0
GUY SAUVAGEAU - UMONTRÉAL Innovative chemo-genomic tools to improve clinical outcome in acute myeloid leukemia	4.75 years	64.75	9.40	16	30	6
JACQUES SIMARD - ULAVAL Personalized risk stratification for the prevention and early detection of breast cancer	5 years	95.06	18.20	48	227	0
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
KYM BOYCOTT - UOTTAWA **BARTHA MARIA KNOPPERS, JACEK MAJEWSKI - MCGILL** **JACQUES L. MICHAUD - CHU SAINTE-JUSTINE** Enhanced CARE for RARE Genetic Diseases in Canada	5 years	14.59	0.00	38	3	0
RICHARD HARRIGAN - UBC **HUGUES CHAREST, MICHEL ROGER - UMONTRÉAL** **MARK WAINBERG - MCGILL** Viral and Human Genetic Predictors of Response to HIV Therapies	5 years	2.45	0.00	1	0	0
CHRISTOPHER MCCABE - UALBERTA **RICHARD GOLD, JOHATHAN KIMMELMAN - MCGILL** PACE-'Omics: Personalized, Accessible, Cost-Effective applications of 'Omics technologies	5 years	26.93	0.00	9	18	0
DON SIN - UBC **ELIZABETH MACNAMARA - JEWISH GENERAL HOSPITAL** Clinical Implementation and Outcomes Evaluation of Blood-based Biomarkers for COPD Management	5 years	6.59	0.00	0	0	0

ASSESSMENT OF COMPLETED PROJECTS

GENOMICS INNOVATION NETWORK COMPETITION

CORE OPERATION SUPPORT	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
PHILIP AWADALLA - CHU SAINTE-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

ENTREPRENEURSHIP PROGRAM - EDUCATION IN GENOMICS

DENIS J. GARAND - ULAVAL Comprehensive genomic analysis of patients with congenital heart disease	3 years	14.1	2.3	0	17	0

ASSESSMENT OF COMPLETED PROJECTS

PROGRAMME DE RECRUTEMENT DE GÉNOME QUÉBEC

CARTAGENE DIRECTOR	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
PHILIP AWADALLA - CHU SAINTE-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

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	3.50	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

ASSESSMENT OF COMPLETED PROJECTS

ABC COMPETITION

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
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 - CONCORDIA Genozymes for Bioproducts and Bioprocesses Development	5 years	314.3	35	52	37	13
PETER FACCHINI - UALBERTA **VINCENT MARTIN - CONCORDIA** 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

2010 COMPETITION: LARGE-SCALE APPLIED RESEARCH PROJECTS

JOHN MACKAY - ULAVAL **JÖRG BOHLMAN - UBC** SMarTForest: Spruce Marker Technologies for Sustainable Forestry	4 years	165.8	37.5	68	115	0
B. FRANZ LANG - UMONTRÉAL **MOHAMED HIJRI - UMONTRÉAL** Improving Bioremediation of Polluted Soils through Environmental Genomics	4 years	154.2	55.1	25	84	0

ASSESSMENT OF COMPLETED PROJECTS

GQ HEALTH COMPETITION

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
GREGOR ANDELFINGER - CHU SAINTE-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 SAINTE-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 - MUHC RESEARCH INSTITUTE 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

ASSESSMENT OF COMPLETED PROJECTS

COMPETITION - QUÉBEC VERT

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
FRANÇOIS BELZILE - ULAVAL GreenSNPs : an enabling technology for environmental geomics in aquatic or land animals and plants	2 years	5.6	2	4	9	0
CONNIE LOVEJOY - ULAVAL Genome and Transcriptomes of Arctic Chromists (GTAC)	1.5 year	4.2	1.2	0	3	0
VINCENT MARTIN - CONCORDIA A Platform for Automated Yeast Genome Engineering (PAYGE)	2 years	2.6	0	0	0	0

GQ PILOT PROJECTS COMPETITION

JAMIE ENGERT - IR-CUSM 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 SAINTE-JUSTINE Whole exome resequencing in familial neural tube defects	2 years	4.8	0	0	0	0

ASSESSMENT OF COMPLETED PROJECTS

COMPETITIONS I & II, HEALTH

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
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
B. FRANZ 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

ASSESSMENT OF COMPLETED PROJECTS

COMPETITIONS I & II, HEALTH (CONT'D)

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
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) Technologiesé	3 years	51	8	6	9	2
ADRIAN TSANG - CONCORDIA Genomic Approach to Identify Fungal Enzymes for Industrial Processes and Environmental Remediation	3 years	167	69	16	22	8
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

ASSESSMENT OF COMPLETED PROJECTS

COMPETITION III, INTERNATIONAL CONSORTIUM INITIATIVE, PRIVAC, TECHNOLOGY DEVELOPMENT

FOR 2018-2019	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
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
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 (P^3G-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 - CHUQ Genomic Point of Care testing (GPOCT) Viral Respiratory tract Infections (VRTIs)	2.25 years	45	2	9	18	1

ASSESSMENT OF COMPLETED PROJECTS

COMPETITION III, INTERNATIONAL CONSORTIUM INITIATIVE, PRIVAC, TECHNOLOGY DEVELOPMENT (CONT'D)

	Project starting date	Number of persons employed (person-years)	Number of scientists trained (person-years)	Number of publications accepted	Number of conferences as speaker	Number of declarations of invention or patents
MICHAEL PHILLIPS - MHI **JEAN-CLAUDE TARDIF - MHI** Pharmacogenomics of Drug Efficacy and Toxicity in the Treatment of Cardiovascular Disease	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 **RYAN BRINKMAN - 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		**5,919**	**1,335**	**1,987**	**3,107**	**181**

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