GenomeQuébec
The Future has Begun

Activity Report

05_06

Vision

Become the reference for genomics and proteomics and one of the best genomics centres in the world.

Mission

Génome Québec financially supports major genomics and proteomics research initiatives, as well as their applications, in association with the academic and industry domains while maintaining and promoting the highest ethical standards.

The mobilizing effect created by these investments will contribute to maximizing socio-economic benefits and establishing Quebec as a leader in the field of life sciences.

A word from the Chairman of the Board

The 2005-2006 financial year, which just ended, was in many ways remarkable.

Firstly, Génome Québec began implementation of its new business plan for 2005-2008. Next, there was the procurement of the funds needed to start up several large projects stemming from Competition III and to set up our technology platforms, including a new pharmacogenomics platform established in collaboration with the MHI and the Université de Montréal. What is particularly significant about obtaining such funds is the leverage effect it produces among our main funding sources, Génome Canada and the MDEIE, tending to support each other's actions.

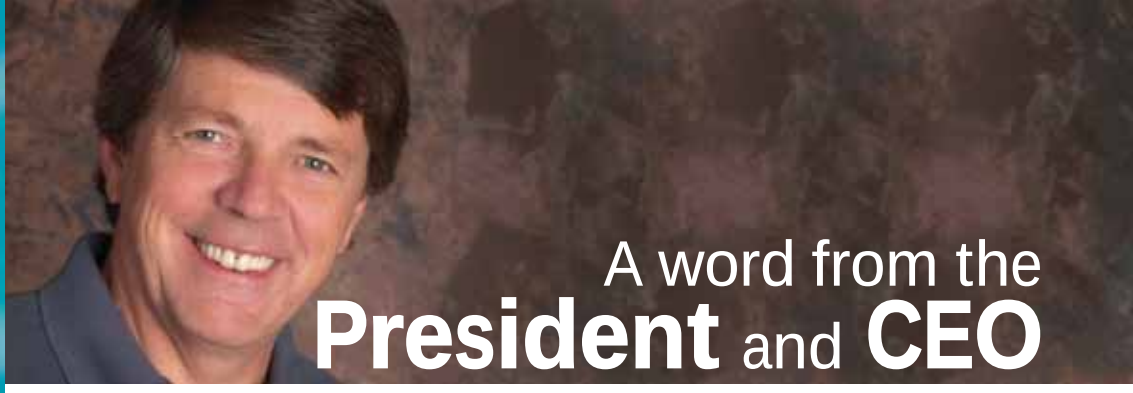
We also had the performance of the Board of Directors assessed by a specialized firm. The main factors being assessed were governance, as determined by the composition of the board and its various committees, the board's role and responsibilities and the decision-making structure. The assessment's recommendations are now being implemented and will allow us, among other things, to express the organization's policies more explicitly, establish a succession plan, and recruit new board members to strengthen our activities relating to technology transfer and financing.

I would like to take this opportunity to thank all the board members for having participated so graciously in this process, and especially all those who have sat on Génome Québec's board since the very beginning.

Finally, this year, Génome Québec began defining a strategy that focuses more closely on the development of specific areas of genomics. Given our access to wide-ranging genomics tools, now providing technical support for our current projects, we would like to make further use of these by strengthening development in certain strategic sectors where Quebec already possesses major advantages. This represents a long-term change of paramount importance to our future actions. For this reason, we began the process of defining this new strategy by consulting Quebec researchers and active players in the genomics field as well as world specialists.

Once again this year, the Board of Directors would like to acknowledge the outstanding work accomplished by the entire Génome Québec team. For this, I would like to thank Paul L'Archevêque, the President and CEO, the management team and the entire staff.

Jean-Marc Proulx
Chairman of the Board



A word from the **President** and **CEO**

A pivotal year, 2005-2006 was marked by the submission and approval of the 2005-2008 business plan. The challenges faced demanded such an effort on the part of our staff that we now need to focus on human resources management, both in order to reap the benefits of our investments and to re-establish a balanced work environment. Despite the magnitude of the effort required, the team in place managed to keep pace with the pre-established objectives.

The report on activities will provide details of our main achievements. However, I cannot leave unmentioned one of the most important to date, namely, the procurement of major funding, in the order of 50.4 million dollars spread over three years, from the Government of Quebec. This is the most significant investment the government has made in the field of genomics research, and apart from the start-up of the seven projects stemming from Genome Canada's Competition III, this financing will allow us to give concrete expression to several of the objectives established in our business plan.

Thus, it will now be possible to:

- orient the efforts of all actors towards the strategic development of one or two areas of genomics/proteomics to maximize leverage for Quebec;
- relaunch the whole notion of "translational research," moving from theory to practice through the financing of mixed academic and private initiatives;
- diversify our "portfolio" of technology platforms, with the benefit of expertise from all over Quebec; for it is by making available to researchers from both the academic and private communities some of the most advanced technologies that we will be able to optimize results.

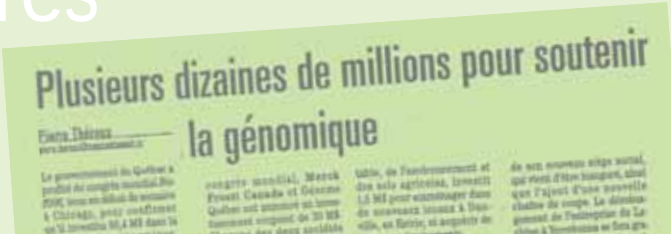
Clearly, genomics is an essential productivity tool for furthering research in the life sciences sector. And for Quebec, this sector unquestionably constitutes a key strategic axis of development, with Génome Québec positioned among its forerunners, where it intends to remain.

Finally, I would like to emphasize that it is because of the excellent work of an entire team that we are in a position to present a report of such quality for the year ending on March 31, 2006. I would, therefore, like to thank all our employees, the members of the Board of Directors and the management team. Without you, none of this would have been possible. Thank you to everyone!

Paul L'Archevêque
President and CEO

Highlights 2005-2006

Les Affaires


Plusieurs dizaines de millions pour soutenir la génomique


Tuer les champignons, garder les emplois

Merck Frosst garde son Centre de génétique fongique à Montréal

PHILIPPE MERCURE

General report on activities

The first half of the 2005-2006 year was devoted to developing and gaining approval for a business plan covering the 2005-2008 period. All of the results obtained follow directly from the five priorities defined in this document.

Thus, to **continue to play a structuring and mobilizing role in genomic and proteomic research**, and to enhance Quebec's competitiveness in these sectors, we undertook an in-depth review of our scientific activities. More specifically, we created the "Strategic and Scientific Advisory Board" (SSAB).

In addition, thanks to a new partnership agreement with the Fonds de recherche en santé du Québec (FRSQ) and the Fonds québécois de recherche sur la nature et les technologies (FQRNT), Génome Québec will now be able to participate in the assessment process of the Canadian Foundation for Innovation (CFI). Finally, we were the first Canadian genomics centre to submit files (5/7) within the context of the start-up process for projects from Competition III, initiated by Genome Canada.

Lise Aubin
Vice President,
Finance and Investments

To **maximize and diversify our funding sources**, we obtained $50.4 M from the Government of Quebec for the implementation of our strategic directions over the next three years.

Marie-Kym Brisson
Director, Public Affairs
and Communications

Given that the organization's commercial capacity is not being fully exploited, and that we hope to **increase exploitation of our technology platforms**, we awarded the firm SECOR a mandate to develop an action plan devoted to the commercialization of the research project portfolio and of the services linked to the platforms. However, we did not await the results of this study before concluding some major agreements, including a partnership with *Merck Frosst*; the first of its type in Canada. In addition, this past year allowed us to again confirm the relevance of our business model, particularly by helping support companies as they passed through the "valley of death" (*Alethia and Emerillon*). Finally, we obtained 33% of the funds available from Genome Canada for the financing of our platforms; this represents the largest amount awarded within the framework of this competition.

Carole Jabet
Scientific Director

In order to **improve management of our business processes**, we developed a job and wage scale assessment program. Since this program was implemented, 96% of employees claim to be satisfied with the changes introduced.

Paul L'Archevêque
President and CEO

The fifth and final priority of our business plan is to **position genomics and Génome Québec within Quebec society**. To do this, in particular, we established a Communications/ Public Affairs Advisory Committee. This multidisciplinary committee is composed of members of influential and respected enterprises and organizations.

Daniel Tessier
Senior Director, Operations
and Business Development

To conclude, we are pleased to confirm that 2005-2006 stood out in terms of the significant progress made by genomics with respect to news exposure. In fact, presented here is the most impressive media review to date.

Highlights 2005-2006

HAP MAP
an historic achievement

Bartha Maria Knoppers and Dr. Thomas J. Hudson

Report on **scientific** activities

Continually in pursuit of scientific excellence, Génome Québec owes its existence, first and foremost, to the presence in Quebec of world class researchers. It is only because we have access to a pool of very high-level researchers, the quality of whose work is recognized by their peers, that we are able to present this report on scientific activities. We salute the excellence of their research.

Although our portfolio was already well-charged with projects accumulated within the contexts of Competitions I and II, to which is added the four projects from the Applied Human Health Competition, the bioinformatic projects and the Technology Consortium, we launched seven new projects this year. A review of the latter, winners of Genome Canada's Competition III, reveals two encouraging trends for Quebec's competitiveness: on one hand, the arrival of new researchers to head large-scale projects; and on the other hand, the consolidation and continuation of projects begun within the context of previous competitions.

Some of the projects stemming from Competitions I and II are now nearing completion of their first phase. An analysis of this first financing experience allows the relevance of the investments made by Génome Québec and its partners to be verified and confirmed. For example, we count 250 trained researchers, close to 400 publications, more than 750 jobs accumulated over the last four years, and almost 30 declarations of invention registered, despite the basic nature of the research. Among our important achievements, we cannot leave unmentioned the discovery of a group of genes, whose variation of expression provides an indication of the risk of graft rejection; this represents the most significant step forward in personalized medicine since *HLA typing*.

We must also note the completion of the first complete catalogue of human genetic variations, the map of haplotypes (HapMap). This indispensable tool will speed up discovery of the genes responsible for common diseases such as asthma, diabetes, etc. This advancement is considered to be an historic achievement.

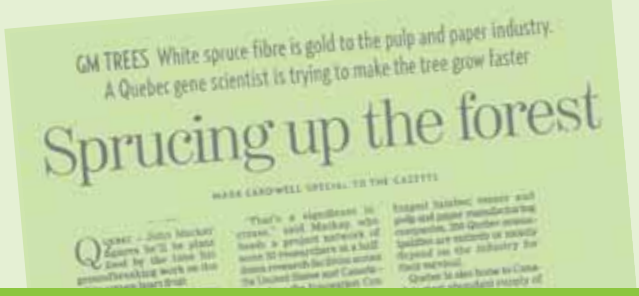
The four projects from the Applied Human Health Competition are already producing excellent results. To date, these research projects have resulted in five declarations of invention, proof that the researchers have a real desire to produce concrete results that will contribute to the advancement of health-related issues in the very near future.

More generally, on the level of scientific activities, the year 2005-2006 marked a change in scientific direction, which led to the submission, in December 2005, of a strategic development plan for genomics. Well-received by our partners, this plan focuses on three main broad axes: creating the "Strategic and Scientific Advisory Board" (SSAB) and "GE^{3}LS Advisory Board," as well as strengthening relationships with strategic partners (the partners' forum, disbursing funds, and the partnership agreement with the FRSQ/FQRNT).

In conclusion, we are confident that this plan will have a positive impact and we firmly believe that it will allow us to identify and initiate, in 2006-2007, new large-scale scientific programs destined for a wider pool of researchers.

C. Jabet

Carole Jabet
Scientific Director


The Gazette

GM TREES White spruce fibre is gold to the pulp and paper industry. A Quebec gene scientist is trying to make the tree grow faster

Sprucing up the forest

New projects

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

Université Laval — John MacKay, Jean Bousquet

Spruce trees are the most widely used species in Canada's forest plantations. Breeding new generations of spruce trees can be a slow process, however. That's why Canadian forest genomics researchers are studying tree growth and yield as well as wood properties, at the molecular level. Genomics can be used to improve the productivity and competitiveness of Canada's forest products industry, which accounts for $81.8 billion of activity annually and provides more than 375,000 direct jobs.

John MacKay, professor of forest biology, and Jean Bousquet, professor of forest genetics and Canada Research Chair in Forest and Environmental Genomics at Université Laval, are project leaders of *Arborea II: Genomics for Molecular Breeding in Softwood Trees*.

Arborea II will create an inventory of the natural variability and expression of thousands of spruce genes. By identifying specific genes associated with growth and wood quality, the project will develop tools and protocols making it possible to select well adapted high-performance spruce trees with better-quality woods. This in turn will promote the competitiveness of the Canadian forest industry. Breeding cycles can take more than 20 years with spruce trees.

Arborea II will draw on the research strengths of the Canadian Forest Service and national and international collaborators, in order to integrate research, technology transfer, economic analyses and studies of the environmental acceptability of molecular breeding of spruce trees. Interacting with provincial research organizations and the forest products industry, the project team will generate new knowledge on a valued multi-purpose tree species, offering social, environmental and economic benefits.

Project Outcomes

Anticipated project results will help to shorten the time it takes to select and breed trees with desired traits, increasing the commercial value of spruce trees for saw logs and for pulpwood.

Pharmacogenomics of Drug Efficacy and Toxicity in the Treatment of Cardiovascular Disease

Montreal Heart Institute; Université de Montréal
Génome Québec; McGill University — Jean-Claude Tardif, Michael S. Phillips

No drug works well for all patients. Genetic differences among patients are believed to account for variations in drug responses. While genomics is opening the way to personalized, predictive and preventive medicine, pharmacogenomics in particular uses a patient's genetic

information to predict individual responses to medication. This is important, since adverse drug reactions are a leading cause of hospitalization and mortality in Canada, the United States and Europe.

Dr. Jean-Claude Tardif, director of the Montreal Heart Institute (MHI) Research Centre, professor of medicine, Pfizer Chair and of the CIHR in atherosclerosis of MHI, affiliated with the Université de Montréal, and Michael S. Phillips, director of Pharmacogenomics at Génome Québec and associate professor at the Université de Montréal are project leaders of *Pharmacogenomics of Drug Efficacy and Toxicity in Cardiovascular Disease*.

Dr. Tardif and Mr. Phillips will lead an international team of clinician-researchers and scientists to address drug response problems in the management of cardiovascular disease, which includes coronary heart disease, congestive heart failure, hypertension and stroke.

The team will investigate the toxicity of lipid lowering drugs, especially statins, which are used to treat atherosclerosis, the concentration of lipids or fats, which narrow or block the arteries. The team will also study the efficacy of new anti-atherosclerotic agents.

Project Outcomes

Dr. Tardif and Mr. Phillips expect to identify relevant biomarkers, which can then be used to develop diagnostic tests. This will help determine how patients will respond to treatments for cardiovascular diseases based on their genetic profile. The project will also develop ethical guidelines to help plan future pharmacogenomic research, and will develop models and strategies to integrate genetic knowledge into health care practices.

Genomics and Public Health (GPH): Building Public "Goods"?

Université de Montréal Bartha Maria Knoppers

Genomics is a powerful tool, which can provide information on the susceptibility of individuals and families to infectious and communicable diseases. Public health researchers are becoming keenly aware of the value of creating, accessing and planning genomic databases, in their quest to understand and control infectious diseases, such as SARS (severe acute respiratory syndrome) and tuberculosis. But such databases raise many ethical, legal and societal questions, in the areas of informed consent, confidentiality, and the boundaries between private and public goods.

Mrs. Bartha Maria Knoppers, Canada Research Chair in Law and Medicine, and Professor of Law at the Université de Montréal, is leading *Genomics and Public Health (GPH): Building Public "Goods"?*

GPH will examine ethical, legal and societal issues related to the use of existing databases or the creation of new ones. For example, have individuals, families, communities or populations involved in research consented to unforeseen changes in the use of their genetic information if databases are merged or put to new uses? And can these databases be used in the public interest or for the public good in ways that protect individuals and family participants?

Project Outcomes

Mrs. Knoppers' team will undertake research, interview health-care professionals and policymakers, organize a policymakers forum and a citizen's workshop and hold international symposia involving public health and genomic researchers, consumer-citizens and health professionals. Her team will develop a policy framework (along with national and international collaborators) in order to help translate genomic knowledge into awareness for disease prevention and health promotion.

continued on page 8

Large scale **project** outcomes March 2006

Competition **I**	Number of Jobs Created	Number of Researchers Trained
Thomas Hudson Regulatory Genetics	32	9
Fathey Sarhan Abiotic Stress Québec	15	8
Franz Lang PEP Québec	12	6
Bussey/Michnick Model Organisms	7	
John Bergeron Proteomics	19	10
Fernand Labrie Atlas	46	14
Génome Québec / Platforms	59	0
Total	**190**	**47**

Competition **II**	Number of Jobs Created	Number of Researchers Trained
John Mackay Arborea	23	12
Emil Skamene Emerillon	12	3
Benoît Coulombe Regulatory Networks	52	21
Rafick Sékaly S2K	44	12
Sherif Abou Elela MoNA	23	4
Thomas Hudson Haplotype	4	1
Guy Rouleau Emerillon	10	1
Terry Roemer Merck Frosst	13	1
Total	**181**	**55**

Competition **Health**	Number of Jobs Created	Number of Researchers Trained
Michel Bergeron Theranostic Technologies	39	12
Deming Xu Merck Frosst	21	4
Barry Posner T2DM	27	4
Thomas Hudson ARCTIC, Colorectoral Tumours	1	0
Total	**88**	**20**

Total Competitions **I, II & Health**	Number of Jobs Created	Number of Researchers Trained
	459	**122**

Total **Bioinformatics I & II**	Number of Jobs Created	Number of Researchers Trained
	50	**54**

Assessment of **completed projects**

Competitions **I & II**	Number of Jobs Created	Number of Researchers Trained
Bartha M. Knoppers GEDS	38	20
Mario Filion Alethia	36	5
Adrian Tsang Fungal enzymes	167	69
Total Competitions I & II	**241**	**94**

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents	Project Starting Date
13	21	5	January 2002
10	16		May 2002
18	18		September 2002
18	55		September 2001
16	125	7	January 2002
49	29	2	August 2001
58	31		October 2001
182	**295**	**14**	

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents	Project Starting Date
17	58	2	October 2002
2	11		January 2003
13	109		January 2003
17	111	3	April 2002
6	9	1	January 2003
11	87	1	January 2003
	14		January 2003
1	3	3	January 2003
67	**402**	**10**	

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents	Project Starting Date
6	18	1	October 2004
			April 2005
1	4	1	October 2004
	7	2	October 2004
7	**29**	**4**	

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents
256	**726**	**28**

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents
24	**11**	

Number of Publications Accepted or Submitted	Number of Conferences as Speaker	Number of Declarations of Inventions and/or Patents	Project Duration
83	153		4 years
1	10	4	3 years
16	22	5	3 years
100	**185**	**9**	

Identification and Characterization of Genes Involved in Common Developmental Brain Diseases

CHU Sainte-Justine Research Centre Guy A. Rouleau
Université de Montréal Pierre Drapeau

Schizophrenia and autism are severe brain diseases that result in enormous human suffering and high healthcare costs. Despite decades of research, the causes of these diseases are still largely unknown. However, both diseases are believed to be associated with genetic (inherited) factors, and can therefore be investigated using genomics.

Dr. Guy A. Rouleau, an authority on the genetic basis of human brain tumours, human neurodegenerative diseases and psychiatric illnesses and Director of the CHU Sainte-Justine Research Center and Dr. Pierre Drapeau, senior neurobiologist with expertise in the development of synaptic transmission, and also director of the *Département de pathologie et biologie cellulaire* at the Université de Montréal, are project leaders of *Identification and Characteristics of Genes Involved in Common Developmental Brain Diseases*.

Drs. Rouleau and Drapeau believe that genes causing schizophrenia and autism carry a high rate of mutations and tend to be located at synapses, which are junctions between nerve cells (and other cells) in the brain where information is communicated and processed. In other words, mutations in specific synapse genes may cause these diseases.

Drawing on a collection of 5000 blood samples collected from individuals affected by schizophrenia and autism (and their family members), the research team will analyse 1000 synaptic genes in 276 patients. This analysis will make it possible to perform the first direct chemical examination of the genes in humans coding for particular synapses and subsequently to validate the biological effects of disease-related mutations of these synapse genes in different animal model systems.

Project Outcomes

The project team expects to identify 10 to 20 genes that directly cause or increase susceptibility to schizophrenia or autism. This in turn will open the way to development of new diagnostic tests, new treatments and improved clinical management for patients – which will be of benefit to health policymakers as well as the genetics and neurosciences research communities around the world.

The GRID Project: Gene Regulators in Disease

McGill University and Génome Québec Innovation Centre Thomas J. Hudson

Gene regulation is the process by which DNA and protein interactions in a gene determine where and how the gene will be activated. Small differences in gene regulation among individuals can lead to disease susceptibility or resistance. But these differences are not well understood yet, according to Dr. Thomas J. Hudson, geneticist, immunologist and allergist, and Scientific Director of the McGill University and Génome Québec Innovation Centre. In order to clarify regulatory mechanisms in common diseases, Dr. Hudson is leading *the GRID Project: Gene Regulators in Disease*.

The *GRID project* will not seek to identify new genes. Instead, the project will focus on regulatory mechanisms in common human diseases, such as abnormal gene production, assembly and turnover. The project will characterize more than 250 disease genes believed to be associated with diabetes, asthma, inflammatory diseases and some forms of cancer. The team expects to identify a cascade of biological steps initiated by regulatory mechanisms in 25 genes that modify disease risk.

Project Outcomes

By identifying the biological steps initiated by regulatory mechanisms, the research team expects to better understand how disease risk is modified. This in turn is expected to open the way to new treatments and health products. At the same time, the project will study the ethical implications and dimensions of this research, so that an appropriate framework for this and other projects can be developed.

An Integrated Physical Genome Map for the Old World Monkey, *Cercopithecus aethiops*

McGill University Ken Dewar

Many species of old and new world monkeys serve as model organisms in biomedical research. Since nonhuman primate models are genetically close to humans, they can help elucidate complex human behaviours and diseases in ways not possible using mouse and rat models. The vervet monkey (Cercopithecus aethiops, also known as the African green monkey), is a non-endangered species native to southern Africa, and is a good model for studying neurological processes.

Mr. Ken Dewar, a principal investigator at the McGill University and Génome Québec Innovation Centre, and an assistant professor in the Department of Human Genetics at McGill University, is leading *An Integrated Physical Genome Map for the Old World Monkey, Cercopithecus aethiops*.

Mr. Dewar's project will be used to improve the understanding of complex processes such as neuro-development and neuro-degradation as well as human conditions such as Parkinson's and substance abuse. By comparing the vervet genome map to the human, chimpanzee and rhesus monkey genome maps, the project will also identify areas displaying genome rearrangements, to aid in our understanding of the mechanisms contributing to genome evolution.

Project Outcomes

The development of techniques for this project will position Canadian researchers to carry out similar genomic studies for other plants and animals of medical, agricultural and evolutionary importance. The project will post data on several mammalian and primate comparative genomics internet portals in the United States and will disseminate primary data in the Genbank repository of the US National Center for Biotechnology Information.

Functional Annotation of Essential Alternatively Spliced Isoforms

Université de Sherbrooke Sherif Abou Elela

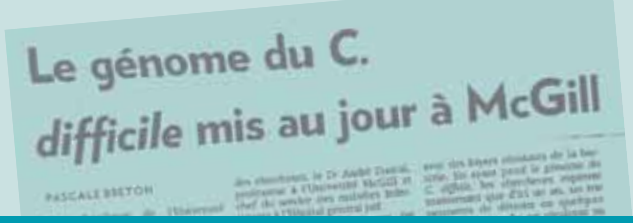
Now that the human genome has been sequenced, the race is on to discover the functions of potential genes.

Mr. Sherif Abou Elela, a molecular biologist at the Université de Sherbrooke's Faculty of Medicine, is project leader of *Functional Annotation of Essential Alternatively Spliced Isoforms*. With a team of highly qualified scientists in the Sherbrooke area, Mr. Abou Elela will lead work on experimental annotation of AS isoforms in some 600 cancer-related genes that control cell proliferation and viability.

According to Mr. Abou Elela, the Sherbrooke team is the only group in the world tackling on such a broad scale the functional annotations of cancer-related splice isoforms and the regulatory circuits that control them.

Project Outcomes

This world-leading project will maintain, recruit and train highly qualified personnel. Moreover, work on identifying AS markers is expected to lead to new diagnostic kits for use in clinical settings. The project team will collaborate with Canadian pharmaceutical and biotech companies, in order to exploit the broad commercial potential of new diagnostic tools and identification of new therapeutic targets.


Le génome du C. difficile mis au jour à McGill

PASCALE BRETON

Report on activities of technology platforms

Through the operationalization of its technology platforms, Génome Québec has played a structuring role in the area of genomics/proteomics research in Quebec, while allowing researchers access to some of the most advanced technologies in the world. Moreover, these technologies are not only available, they are also operated by expert staff trained to optimize their performance: a proven winning formula. Although initially designed to be used for large genomics and proteomics research projects financed by Génome Québec and Genome Canada, the technology platforms are also made available to the entire scientific community in both the academic and private sectors.

On this basis, we serve some 275 clients per year, and annual revenue growth has been approximately 20% for the last two years. The breakdown of revenues remains stable, with 60% from projects financed by Génome Québec and Genome Canada and 40% from other clients with an interest. This year, the platforms installed in the McGill University and Génome Québec Innovation Centre generated revenues of $9.9 M, which represents an increase of 30% over 2004-2005.

As indicated in the report on scientific activities, Génome Québec gained seven new research projects this year. Thus, with a view to supporting the activities linked to the results of Competition III, we have presented Genome Canada with a request for financing of the technology platforms. Directed by Dr. Thomas J. Hudson, Scientific Director of the McGill University and Génome Québec Innovation Centre, this request is basically aimed at obtaining the funds needed for the implementation of the new research projects, and particularly for procurement of the required infrastructure, equipment and resources.

We are proud to have received 33% of the amount available from Genome Canada, a sum of $12.5 M. This is the largest amount to have been granted in Canada within the context of this competition. These results confirm, in our view, recognition of the quality and expertise that our technology platforms demonstrate. This new financing will allow for the creation of about twenty new specialized jobs, which will help to further extend our expertise. In addition, we have been able to double the magnitude of our sequencing technology platform; thus increasing our level of competitiveness. These new developments will greatly contribute to positioning us competitively for future financing contests.

Finally, we are working very hard to maintain our level of competitiveness, by supplying the academic and industrial communities with cutting-edge technological tools. For this purpose, we plan to announce new technology platforms in the coming years, and thus continue to extend the range of services we offer to the community of users. To ensure optimal use, we are currently developing a strategy aimed at positioning the platforms with regard to commercial exploitation.

Daniel Tessier
Senior Director, Operations and Business Development

Board of Directors

Jean-Marc Proulx, Chairman of the Board, President and CEO, and President of the Board of Directors, Gestion Valeo s.e.c.

Dr. Alain Beaudet, President and CEO, Fonds de la recherche en santé du Québec (FRSQ)

Louis Berlinguet, Ph.D., Administrator

Chantal Brunet, Ph.D., Vice-President, Sciences Innovatech Québec and Chaudière-Appalaches

Jean-Claude Cadieux, Ph.D., Management Consultant, Vice-President of the Board of Directors

Hélène Desmarais, President of the Board of Directors and CEO, Centre d'Entreprises et d'Innovation de Montréal (CEIM)

Sylvie Dillard, President and CEO, Fonds québécois de la recherche sur la nature et les technologies (FQRNT)

Martin Godbout, Ph. D., President and CEO, Genome Canada

Paul L'Archevêque, President and CEO, Génome Québec

Luc Tanguay, Senior Executive Vice-President and CFO, Theratechnologies Inc.

Georges Archambault (Observer), Assistant Deputy Minister, Direction générale de la recherche et de l'innovation (MDEIE)

Me Jean Brunet, Secretary of the Board and Lawyer, Secretary of the Board, Desjardins Ducharme Stein Monast

Executive Committee

Jean-Marc Proulx, Gestion Valeo s.e.c. (President)

Jean Brunet, Desjardins Ducharme Stein Monast

Jean-Claude Cadieux, Management Consultant

Paul L'Archevêque, Génome Québec

Luc Tanguay, Theratechnologies Inc.

Audit/Investment Committees

Luc Tanguay, Theratechnologies Inc. (President)

Louis Berlinguet, Ph.D., Administrator

Jean-Claude Cadieux, Ph.D., Management Consultant

The GEEE! in Genome Exhibition opens in Saguenay
From left to right : Dr. Daniel Gaudet, Centre de médecine génique communautaire de l'Université de Montréal, Mr. Jean Tremblay, Mayor of Saguenay, Mr. Claude Béchard, former minister, MDEIE, Mr. Paul L'Archevêque, President and CEO, Génome Québec and Mr. Pierre Lavoie, CORAMH

SSAB (Strategic and Scientific Advisory Board)

Dr. Thomas J. Hudson, McGill University and Génome Québec Innovation Centre (President)

Michel Bouvier, Ph.D. , Université de Montréal

Clarissa Desjardins, Ph.D. , Caprion Pharmaceutiques Inc.

Marc Lalande, Ph.D. , University of Connecticut Health Center

John Mackay, Ph.D., Université Laval

Francis Ouellette, Ph.D. , Institute of Genetics

Pierre Tambourin, Ph.D. , Génopole Evry

Pierre Thibault, Ph.D. , Université de Montréal

GE³LS Advisory Board

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Sylvie Bordet, CRDP, Université de Montréal

Nancy Gélinas, Ph.D. , Université Laval

Trudo Lemmens, Ph.D. , Toronto University

Huguette Marcotte, Huguette Marcotte Communications

Eric Racine, Ph. D., IRCM

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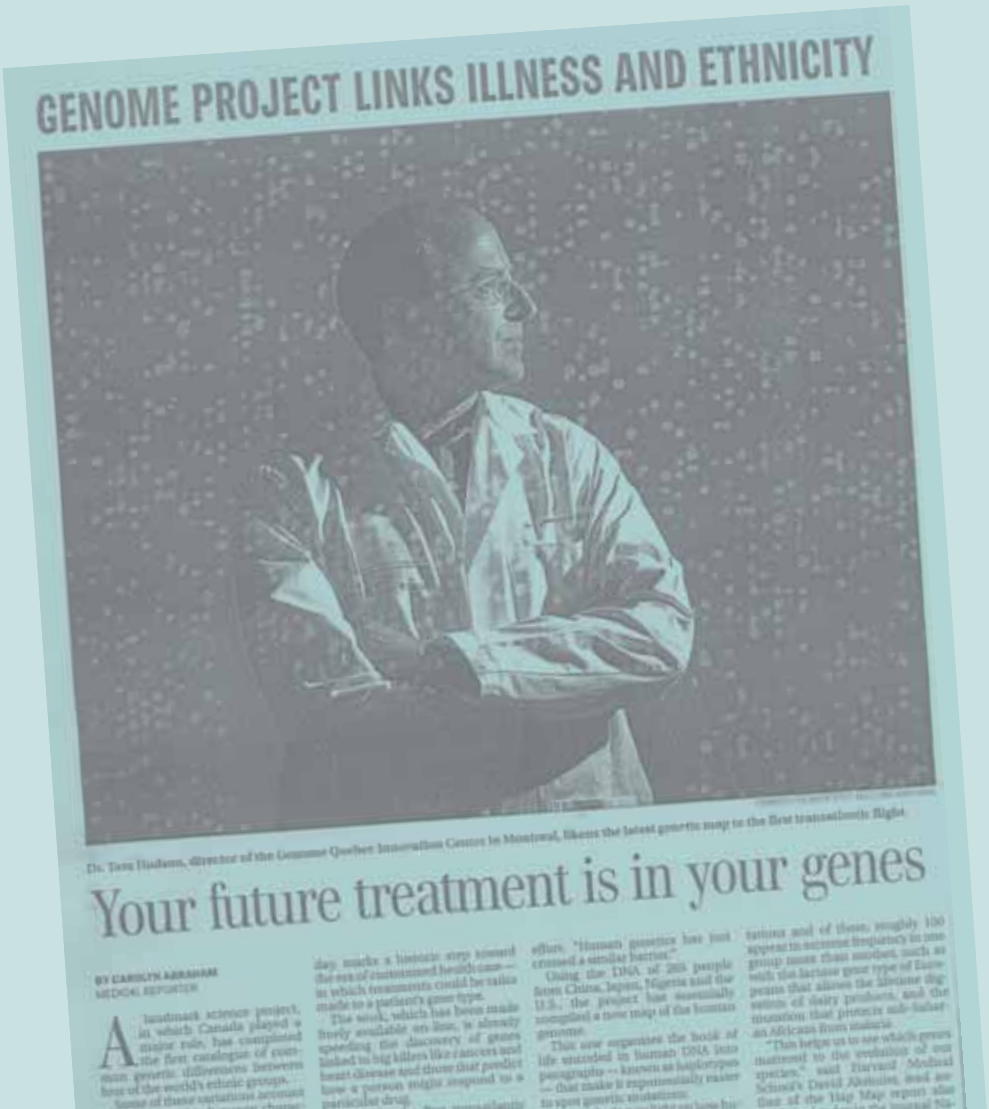

GENOME PROJECT LINKS ILLNESS AND ETHNICITY

Dr. Tara Hudson, director of the Genome Quebec Innovation Centre in Montreal, likens the latest genetic map to the first transatlantic flight.

Your future treatment is in your genes

BY CARLYN ABRAHAM
MEDICAL REPORTER

A landmark science project, in which Canada played a major role, has completed the first catalogue of common genetic differences between four of the world's ethnic groups.

Some of these variations account

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Les Affaires

À pas de géant dans l'infiniment petit

La recherche pourrait conduire à une révolution semblable à celle des biotechnologies

Gaël Le Corre-Lalibert

Les nouvelles technologies facilitent et accélèrent l'exploration des mystères entourant l'ADN. Les recherches en génétique et génomique, qui visent une meilleure compréhension du fonctionnement du code génétique, explosent.

« La génomique d'aujourd'hui, c'est la biotech de demain », note **Paul L'Archevêque**, président-directeur général de **Génome Québec**.

Jacques Drouin, chercheur à l'**Institut de recherches cliniques de Montréal**, connaît bien le domaine. Il fait partie du conseil consultatif de l'**Institut de génétique des Instituts de recherche en santé du Canada** (IRSC).

aux IRSC, ce qui permet de lancer des initiatives provinciales et de soutenir la recherche.

Toutefois, toujours selon lui, le développement de la recherche dépend des chercheurs qui la font. « Le Québec possède une solide tradition dans la recherche en génétique humaine. La présence d'importants chercheurs dans le domaine au Québec, comme **Charles Scriver**, à l'**Université McGill**, a permis de former des chercheurs de haut niveau. Ce qui montre l'importance d'attirer et de retenir des chercheurs d'envergure internationale », dit M. Drouin. Charles Scriver est considéré par plusieurs chercheurs comme le père de la génétique moderne au Québec.

Un avis partagé par **Bernard**

mondiale dans la génétique humaine », indique-t-il.

Le Réseau veut maintenir la position de tête du Québec en favorisant les échanges entre chercheurs en plus de fournir des subventions pour des infrastructures importantes comme le projet Baisac à l'**Université du Québec à Chicoutimi** (UQAC), des banques de lignées cellulaires de l'Université McGill et l'**Université Laval** et les plateformes techniques de Génome Québec.

Des millions investis

La génomique permet d'identifier la relation entre des gènes spécifiques et plusieurs maladies. Au Québec, l'organisme Génome Québec subventionne la grande majorité de la recherche qui s'effectue dans ce domaine. « Nous avons investi 300 M$ en cinq ans et nous

secteur universitaire et privé. Ses fonds proviennent de **Génome Canada**, du ministère du **Développement économique, de l'Innovation et de l'Exportation** (MDEIE), de même que d'entreprises privées. Grâce à ses investissements, plus de 230 chercheurs ont été formés et 30 déclarations d'inventions et de brevets ont été déposées.

Génome Québec gère des projets dans six grands secteurs : la santé humaine, la bioinformatique, l'éthique, l'environnement, la foresterie et l'agriculture. « La génomique ne se limite pas à la santé humaine. La recherche s'applique à tous les champs du vivant », explique M. L'Archevêque. ■