

ADVANCED MEDICAL RESEARCH
INSTITUTE OF CANADA

Translating Science for a Healthier North

Dr. Francisco Diaz-Mitoma, CEO & Scientific Director, AMRIC
Presentation to City of Greater Sudbury's Finance Committee
Tuesday, June 18th 2013
City of Sudbury Council Chambers

Building on Success

Since the launch of the Advanced Medical Research Institute of Canada (AMRIC) just six months ago we have made outstanding strides at not only becoming a leader in health research but also in economic development in Sudbury.

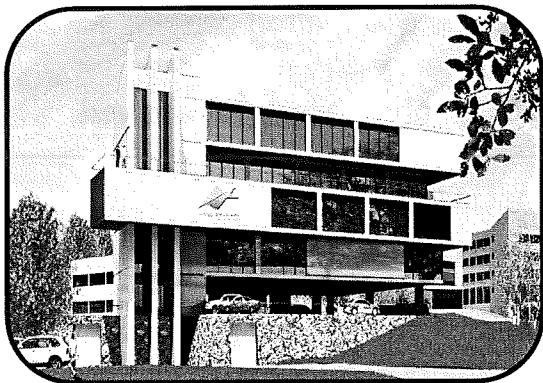
Through the support of the Greater Sudbury Development Corporation, Northern Ontario Heritage Fund Corporation, Health Sciences North, the Northern Cancer Foundation, the Health Sciences North Foundation, the HSN Volunteer Association and other partners, we have been able to deliver on the early promises that AMRIC represented.

We have over 60 staff with 12 leading scientists working on health care advances. We have established the HSN Volunteer Association Chair in Geriatric Research and recruited internationally-renowned geriatric researcher Dr. Janet McElhaney. Her work is receiving international attention but more importantly her expertise is improving health care to for seniors in Sudbury.

And that is just the beginning.

In the coming months we will have more exciting announcements about new economic partnerships, new 'superstar' researchers, new research Chairs being established, and publications of our research that will impact how health care is

Building for Growth



delivered here in Sudbury, across the North and Canada.

We need a facility dedicated to health research if we are to continue on this path of success.

Our current location at HSN was meant to be a starting point only. As momentum grows and we hire new researchers, we require a facility to accommodate our accelerated growth and expansion.

To meet our needs we are looking to construct a 57,000 sq ft state-of-the-art facility that will enable AMRIC to stay at the forefront of medical research and discovery and create jobs.

This space is urgently needed.

It is crucial that funding is obtained in time for us to start construction in 2016 with doors opening sometime in 2018.

This investment is not only critical to the future of AMRIC but will usher in new jobs and economic opportunities for Sudbury. It will also have a positive effect on education and health care.

Our Request

The estimated cost for the AMRIC facility is \$60 million. We wouldn't expect the City of Greater Sudbury to fund this entire amount.

We understand that this is a sizeable request, especially at a time when funds are becoming scarcer. Provincial cutbacks and the slowdown in the mining industry have put even more pressure on the city to find efficiencies rather than new capital costs.

That is why out of the \$60 million needed we are asking the City of Greater Sudbury to invest \$10 million in this project—much like the \$10 million the Laurentian School of Architecture received.



We expect that is the best way for the city to help with this.

This investment could be financed through \$1 million per year over the next 10 years.

Other Areas of Support

AMRIC has been meeting with representatives from the provincial and federal governments about this project. They are extremely supportive and are looking to see local support for this initiative.

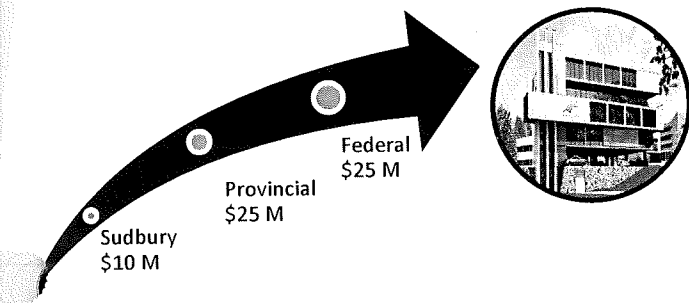
We are confident we can leverage your investment for a further contribution of \$25 million from the province and another \$25 million from federal sources.

What this means for this council is that a \$10 million dollar investment will result in an additional \$50 million being spent here in Sudbury.

To further ensure that this investment will achieve results, the city's funding can be contingent on support from provincial and federal governments.

This guarantees your investment of \$10 million will result in a 500% increase in its economic impact in the city.

This would mean short term jobs and growth in the construction industry in Sudbury. This investment will also have a long term stimulus effect through creating the base for new highly skilled jobs in Sudbury.



A Powerful Economic Impact

Investment, employment growth and the economic impact of AMRIC will be significant. AMRIC is projected to yield economic and development benefits for Sudbury totaling between \$42 and \$48 million a year during the early phases of our operations.

Financial Impact on Sudbury	
Direct	\$23.5 Million
Indirect	\$18.5 - \$24.5 Million
Total	\$42 - \$48 Million a year
Jobs	
Direct Employment	160+ Jobs at AMRIC
Indirect Job Creation	160-210 Jobs in our Community
Total	320-370 Full time highly skilled jobs

Over the short-term, job creation will be linked to the construction of a new facility as a result of increased demand for spin-off and/or support services. These services include supply sales, distribution, administration, retail sales, construction, project management, food service, business support services and technical support services. Added expenditures on housing and other goods and services represent new or partially new revenues for the region.

A greater economic benefit will be realized moving forward through long-term, permanent, knowledge-based jobs that will add stability to the local economy.

By targeting the health priorities of the region, building strong research platforms, attracting renowned researchers to Sudbury, and designing the enterprise from the outset for accelerated clinical application and commercial development, AMRIC will be well positioned to create jobs and to elevate the region's status as a leader in the knowledge economy.

Investing for the Future

Supporting AMRIC will represent a solid investment for the future of Sudbury.

AMRIC is committed to working with local organizations and businesses to capitalize on economic development opportunities and to create jobs.

This is a project which will ensure Sudbury possesses the capacity for research, enhance the ability to perform clinical research trials for the benefit of patients and deliver economic spin-offs many times that of the initial investment.

It will also improve the recruitment of medical experts to Sudbury and its surrounding areas.

The success of AMRIC will provide diversified, sustainable economic development and spin-off benefits for Sudbury and will help the city entrench its reputation as a world leader in research.

It will leverage existing health care investments and attract more private sector investment into the region. It holds the promise of creating exportable products, services and expertise.

AMRIC is an important and strategic investment in health care for the future.

Other Economic Impacts

\$400,000 in spending from conferences and visiting researchers

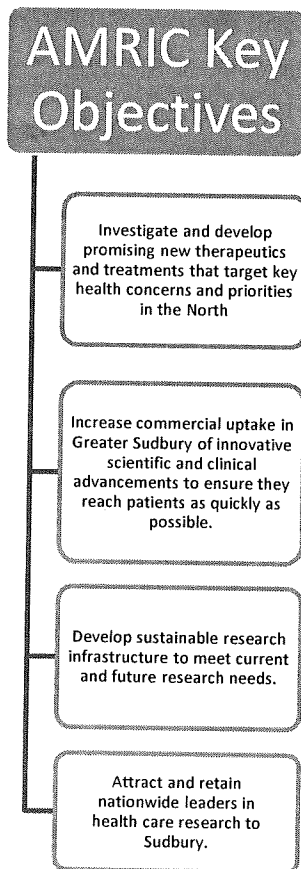
\$150,000 to local non-profits and community groups

6-8 Spin off companies in 8 years

Increase in retail estate activity

Sudbury becoming a Health Care Innovation Hub

Strategic Priorities and Alignment with Partners



The strategic priorities between AMRIC and the City of Greater Sudbury are linked.

These priorities target key strategic areas found in the regional economic development strategic plan for Greater Sudbury – *Digging Deeper, Coming of Age in the 21st Century*.

By recruiting and retaining talent, increasing economic growth, and leveraging partnerships with other levels of government, AMRIC will contribute to the region's competitiveness in the global economy.

Places to Grow, the growth plan for Northern Ontario (March 2011), focused on building diversified economies that stimulate innovation, and encourage entrepreneurship, and healthy, educated, skilled citizens.

This is to be achieved and supported by a modern and efficient infrastructure that can only be accomplished through an integrated approach with government and private sector partners.

AMRIC is strategically aligned with this vision and will become a critical driver in creating innovative business opportunities through commercialization.

Other Benefits

Health

In addition to the economic benefits for the community, AMRIC will have a positive impact on the actual health of the people of the Sudbury region.

As the research arm of Health Sciences North (HSN), we will have an immediate impact on the health of patients from Sudbury.

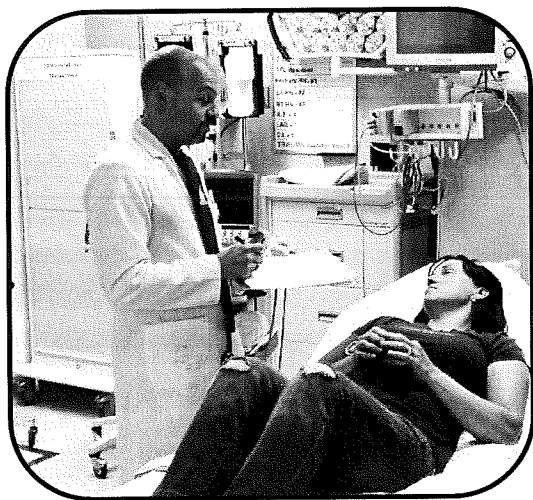
More Doctors

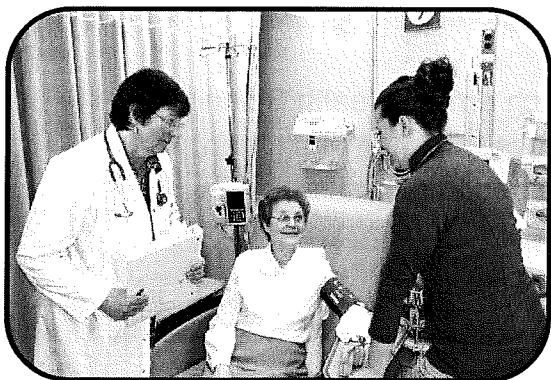
With a funding commitment for this new facility, AMRIC will have a positive effect on attracting more doctors to Sudbury. Many top researchers are also physicians and will practice medicine in Sudbury and HSN.

AMRIC and its world class facility will also help attract top medical talent to practice in Sudbury. No longer will we be seen as just a consumer of medical services, but rather as a leader in cutting edge health care delivery in Canada and around the world.

Advanced Care

The combination of increased medical personnel and research means that the patients in Sudbury, and across the North, will have more access to world class health care.





Already we are seeing the effects of AMRIC research on care here in Sudbury. For example, new programs are being developed for seniors, using the latest research put into practice, to help them with their unique health concerns, keeping them in their homes longer, and freeing up hospital beds.

Access to cutting edge treatments and procedures

These facilities will also contribute to AMRIC's ability to develop new medicines, treatments and procedures.

AMRIC's key priority is to investigate and develop promising new therapeutics and treatments that target key health concerns and priorities in Sudbury and across the North. As our research begins to bear fruit, those successes will be available to patients here in Sudbury first.

Education

AMRIC will provide a unique and stimulating training environment by bringing together internationally recognized expertise and substantial teaching experience with cross disciplinary research.

*Strong partnerships with NOSM
Laurentian, Cambrian College, &
Collège Boréal*

AMRIC has established collaborations with NOSM, Laurentian University and the two colleges. In fact, AMRIC researchers

currently hold 17 teaching positions at these institutions.

Just this past February, AMRIC and Cambrian College signed a five-year Memorandum of Understanding which would see both institutions collaborate on health research and training. We are working towards a similar agreement with Collège Boréal.

These collaborations mean that the knowledge that AMRIC is developing and bringing into Sudbury will foster the next generation of doctors, health care providers and researchers.



Cutting edge facilities and equipment to train with

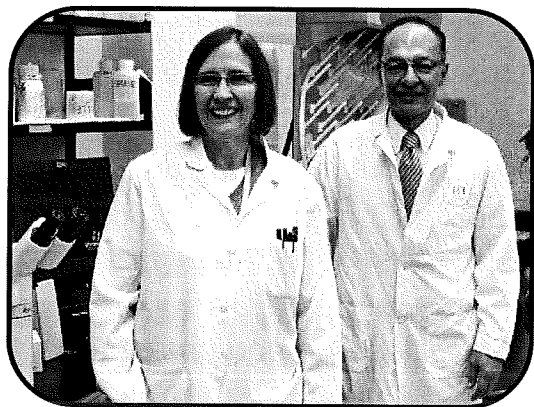
Not only will our researchers and scientists contribute to education but so will the facility. Students at AMRIC have access to many of our state of the art labs and equipment. Students get world class training on how to use AMRIC's specialized equipment, which will advance their research and broaden what is possible for them to achieve.

It will also ensure that more post-graduate (Masters, Ph.D.'s, and Post-Doctoral Fellows) learners come to Sudbury to advance their education and research.

The City

Attracting highly skilled workers to live in Sudbury

As with doctors, AMRIC will also attract other highly skilled knowledge industry workers here to Sudbury to work at AMRIC. Some will be scientists and research staff who will be relocating to Sudbury to work at AMRIC. Others will come to Sudbury through our business partners or as part of some of the spin off companies.



Even at this early stage AMRIC has been successful in attracting some of Canada's top talent. These positions are populated by a creative class of professionals that advance and contribute to the economic, cultural and social fabric of the community.

To attract researchers who are "superstars" and at the top of their field in research, AMRIC plans to establish five Research Chairs, which are funded academic/clinical research positions. AMRIC's goal is to secure a \$2.5 million endowment for each chair, in areas that reflect its strategic research priorities.

The first of these, a Chair in Geriatrics, has been established and partially supported through HSN's Volunteer Association and NOHFC.

AMRIC will create sustainable, knowledge-driven jobs. This helps to overcome out

migration and declining employment opportunities in Sudbury.

Creating jobs and the innovative environment to keep our youth here in the north

While AMRIC will attract new workers to Sudbury it will also create employment and new opportunities for people here, especially our youth.



There will be an opportunity for many of the students studying in the biomedical field to continue their work not only through AMRIC but also through many of our partner organizations.

At the same time the economic impact on Sudbury will also have an effect on the retail, service, art and cultural industries in the city. These other sectors will not only benefit from the economic impacts of AMRIC but also the spirit of innovation that we hope to instill.

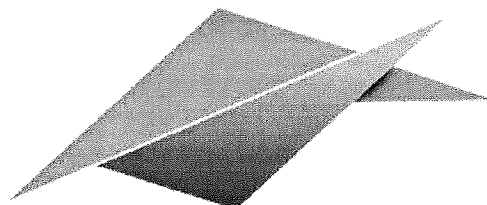
These factors will contribute to a sustainable economy in Sudbury that will offer young people a dynamic range of options to pursue their future closer to their friends and family.

About AMRIC

Created in 2011, AMRIC is an independent, non-profit corporation governed by a Board of Directors that includes representation from HSN, NOSM and Laurentian University. The goal is to accelerate the translation of innovative scientific ideas into widespread application. By focusing on the health priorities (geriatrics, cancer, chronic diseases and infectious diseases) of the people of Northern Ontario – and by extension, other regions nationally and globally that present similar health care or disease profiles – AMRIC is well positioned to leverage public and private investment to advance and apply knowledge in promising new therapeutics.

AMRIC is the logical extension of what is already a vibrant and growing teaching, research and health care system in the region. AMRIC's research spans the full spectrum of related health science, from basic molecular biology and epidemiology, to clinical trials and the development of new therapies, to health services and knowledge translation.

AMRIC is building upon this heritage to establish a leading role in the research and development of vaccines and early stage manufacturing. This is an important and underserved niche market that holds promise for returns on research and development investment and positive health outcomes. The focus is, and will continue to be, the development of vaccines that prevent infectious diseases. This will have a direct impact on rates of hospitalization and disability resultant from chronic diseases.



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17 June 2013

Council of the City of Greater Sudbury
PO Box 5000, Stn A
200 Brady Street
Sudbury ON P3A 5P3

Dear Councillors:

Re: Letter of Support for AMRIC

As Director of the Canadian Center for Vaccinology, vaccine research is of particular importance to me. Not only is vaccination Canada's number one public health achievement—having saved more lives in this country in the last 50 years than any other health intervention—it is also the single most cost-effective health investment.

That is why I believe that the Advanced Medical Research Institute of Canada (AMRIC) has an important contribution to make to the Canadian research landscape. No one else in the country is taking on the projects that AMRIC is researching to such a degree. That's what makes AMRIC unique. In studying the Canadian vaccine research landscape, we see that what is currently missing is the early-phase research manufacturing capability that AMRIC is planning to develop in Sudbury. This capability will be an important contribution to vaccine research and also aligns well with the recently announced reorganization at the National Research Council and their renewed focus on vaccine development.

For the city of Sudbury, AMRIC will provide benefits in several areas, including education, the local economy, and health-related matters. Moreover, AMRIC will also play a large role for Canada as a centre for research.

To do this, AMRIC needs to have proper facilities and equipment. I realize that money is tight in the current economic climate and that a contribution of the size proposed is not made lightly. However, this investment would be a prudent investment for Sudbury as AMRIC is establishing itself in a profitable place within the Canadian research landscape. If AMRIC succeeds then we all do, through good jobs in Sudbury and better health in Canada and around the world.

Sincerely,

Scott A. Halperin, MD
Professor of Pediatrics and Microbiology & Immunology
Head, Pediatric Infectious Diseases
Director, Canadian Center for Vaccinology

A collaboration of



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June 17, 2013

City of Greater Sudbury
200 Brady Street
Sudbury, ON P3E 3L9

Dear Greater Sudbury Council:

The launch of the Advanced Medical Research Institute of Canada (AMRIC) upholds a visionary idea that allows your community to stand out as a leader in health care research and innovation. The cutting edge medical research that AMRIC conducts, in turn, aims to improve health care locally in our community and worldwide.

The activities at AMRIC, such as facilitating access to valuable vaccines, have the potential to have a significant impact on health care in Canada and around the world. We know that access to vaccines reduce significant economic losses, as well as morbidity and mortality, due to infectious diseases. What is also extremely interesting is how AMRIC is looking to vaccines to help address other health issues such as smoking. This is truly innovative and cutting-edge medical research.

It is hard not to see the economic benefits that AMRIC will reap for your community. The research and innovation that AMRIC will produce is much sought after. I can see this leading to a surge in knowledge-based jobs and economic activity in this growing sector.

However, it is my opinion that AMRIC's potential cannot be realized without the proper facilities.

This is why I am endorsing AMRIC's request to you for a \$10 million investment. This investment is not only important for AMRIC to carry out much needed research, but will also support the launch of it into a position of leadership in health care research in Canada.

Thank you very much for helping to keep AMRIC an ongoing success.

Sincerely,



Lorne A. Babiuk, OC, SOM, PhD, DSc, FRSC
Vice-President (Research)

LAB/cf



Ottawa Hospital
Research Institute
Institut de recherche
de l'Hôpital d'Ottawa

June 18, 2013

Dr. Duncan J. Stewart

CEO & Scientific Director
PDG et Directeur scientifique

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The Ottawa Hospital/
V.P. Recherche
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Dear Greater Sudbury Council:

The high level of medical knowledge and practices that we enjoy today are the result of years of health research. Cures and treatments for diseases and conditions that were once considered life-threatening have been made possible because of the many important discoveries that health research has produced. Medical research is essential to build the future of medicine and to reduce the impact of our greatest health challenges.

From what I see the Advanced Medical Research Institute of Canada (AMRIC) is carrying on this tradition. Since its launch I have been impressed with the trajectory that AMRIC has achieved. It is already becoming a place of leadership in key areas of health research.

As I am sure you are aware, the early stages of AMRIC have already attracted some of Canada's top talent to Sudbury. The current research programs in chronic diseases and infectious diseases, vaccine development and immunotherapy as well as tumour biology is very promising. As this research enterprise continues to grow, it now finds itself in need of a larger and permanent location so it can continue building on its success.

That's why I wanted to write in support of AMRIC's request for the City of Greater Sudbury's investment into their new facilities.

It may seem strange that as the head of the Ottawa Hospital Research Institute (OHRI) I would be advocating for the creation of an organization that might well compete with us for dollars and talent. However, I feel that AMRIC has found itself an important niche and the promise it has for advanced health research in Canada will benefit health and science.

Thank you,

Duncan J. Stewart, MD



Northern Ontario
School of Medicine

École de médecine
du Nord de l'Ontario

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Sudbury ON P3E 2C6
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June 17, 2013

Dear Greater Sudbury Council,

As Dean and CEO to the Northern Ontario School of Medicine (NOSM), research is a fundamental component of medical education. At NOSM, we are committed to establishing international recognition as a leader in both research and education. Research has been identified as a key area of improvement, and is acknowledged as a critical element for its academic mandate and future success.

NOSM research is primarily tackling questions of importance with a goal of improving the health of the people of Northern Ontario. In order to do this, NOSM partners with its host universities, teaching hospitals and other key organizations. Among those being the Advanced Medical Research Institute of Canada (AMRIC). AMRIC works in close partnership with NOSM as it performs superior medical research locally. AMRIC is of extreme importance, not only to NOSM, but to the city of Greater Sudbury. AMRIC serves as an important resource for NOSM, as well for other local educational institutions as it benefit students, medical professionals as well as the community at large.

Apart from the importance of the research it conducts, it also plays a large role for Sudbury's reputation as a growing medical hub. One of the many benefits is easing the recruitment process for physicians to Sudbury. This also is vital for NOSM as it provides opportunities for our learners to remain in the North.

As such, I support AMRIC's request to you to construct their brand new facility. This new facility will ensure that AMRIC's research of important health needs are developed and instituted locally.

Thank you very much for your support,

Sincerely,

Dr. Roger Strasser AM
Dean and CEO
Northern Ontario School of Medicine