Saint Mary’s University’s Strategic Research Plan

Introduction

The 2012 Strategic Research Plan (SRP) of Saint Mary’s University re-envisions and renews the original 1999 SRP and the numerous minor updates to the Plan which had occurred in the intervening period. Renewal of this SRP was coincident with, and connected to, the renewal of our 2012-17 Academic Plan - Building a Community of Global Learners, finalized in February 2012. Saint Mary’s SRP was approved by its Senate on December 14, 2012 after more than a year-long consultation and writing process.

Aside from meeting the prescribed requirements of certain funding programs of the Government of Canada (e.g., the Canada Research Chairs Program), Saint Mary’s SRP serves several other roles for the University. It identifies to a broad audience the University’s overall research mission and objectives, and also recognizes specific research themes in which we have particular strength. It also serves as a guide when we plan for future resources investments (human, financial and physical) in our research activities.

While Saint Mary’s SRP identifies Major Research Themes, it is not an exclusionary document. While the Major Research Themes represent areas of particular strength of the University, the broad scope of the research enterprise of Saint Mary’s requires that we should always be open to strategic opportunities that will enable advancement of our overall research mission and objectives. For example, newly emerging research opportunities/clusters at Saint Mary’s include the interdisciplinary study of culture, retail studies, and applied economics.

The Associate Vice President Research is responsible in assessing the University’s progress in meeting the objectives set out in the SRP. This will be done on at least an annual basis and will be communicated to the University community through reports to bodies such as Faculty Councils, Senate and the Board of Governors, as well as the University’s website.

Research at Saint Mary’s University

Saint Mary’s University traces its origins back to 1802, when it was originally founded as a school for Roman Catholic boys. Over the last two centuries it has evolved into a modern, secular, metropolitan university. It is the second-largest university in Nova Scotia with approximately 8000 students spread over four Faculties (Arts, Science, the Sobey School of Business, and Graduate Studies and Research). Although it had been primarily an undergraduate university for many years, it now offers many Masters and PhD graduate programs in various areas of strength within the humanities, social sciences, and the natural sciences. Research activity has increased significantly in the recent past. For example, externally sponsored research funding has more than quadrupled between 2001-02 and 2011-12. Saint Mary’s has advanced in Canadian Research University of the Year ranking by Research InfoSource’s from not being listed among the top 50 in 2002, to 35th place in 2010.

Funding for research at Saint Mary’s comes from many sources. A significant portion of Saint Mary’s operating budget is dedicated to meeting the direct costs (e.g., equipment, travel expenses, research student funding, etc.) and the indirect costs (e.g., administration, library holdings, laboratory and research facilities upkeep, etc.) of our research activities. Externally sponsored research comes from many sources, including the Government of Canada’s funding program and agencies (e.g., ACOA,
CIHR, SSHRC, NSERC, CFI, CRC), provincial departments and agencies (including the Nova Scotia Health Research Foundation (NSHRF) and the Nova Scotia Research and Innovation Trust (NSRIT). In 2005, Saint Mary’s operationalized its Industry Liaison Office (ILO). The ILO is a component of Springboard Atlantic, a not-for-profit corporation with 18 Universities and Community Colleges members from across Atlantic Canada. Springboard’s mission is to mobilize innovation to enhance the economic development of the region. Saint Mary’s ILO has made new funding opportunities available to our researchers by making connections with industry and other private and public sector organizations. The ILO also helps transfer new discoveries and knowledge from our research activities to receptor communities external to Saint Mary’s.

**Saint Mary’s Research Vision, Objectives, and Major Research Themes**

In concert with the Vision, Mission, and Core Values of the University, and our 2012-17 Academic Plan, the **Research Mission** of Saint Mary’s University is:

_To engage in research that applies to, and is valued by communities from around the corner, to around the world, and that cultivates intellectual curiosity and creativity of our faculty and students._

The **Major Research Objectives** of Saint Mary’s University SRP are:

- To carry out high quality research that builds on existing strengths and partnerships, with particular emphasis on interdisciplinary endeavours;
- To develop research programs that are valued by, relevant to, and engage communities - locally, regionally, nationally and internationally;
- To ensure that students, both undergraduate and graduate, benefit from research activities at the University.
- To disseminate and translate the outcomes of our research to receptor communities who can best benefit from them.

The five **Major Research Themes** of Saint Mary’s Strategic Research Plan and the nine **Canada Research Chairs** (CRC) currently distributed among the Themes are:

- Research for Atlantic Canada Communities:
  - A Tier 2 CRC in Atlantic Canada Studies
- Innovation in Business and Workplace Studies:
  - A Tier 1 CRC in Occupational Health and Safety; a Tier 2 CRC in Industrial/Organization Psychology; a Tier 2 CRC in Management; and a Tier 2 CRC in Finance.
- The Environment and Natural Resources:
  - A Tier 2 CRC in Environmental Studies and Material Science.
- Astronomy, Computational Sciences, and Subatomic Physics:
  - A Tier 1 CRC in Astronomy; and a Tier 2 CRC in Astronomy.
- International Development and Human Migration Issue:
  - A Tier 2 CRC in International Development Studies.
Canada Chairs Research Program

The Canada Research Chairs (CRC) program stands at the centre of a national strategy to make Canada one of the world's top countries in research and development. Chairs are assigned by the CRC Secretariat to universities in Canada. The number of CRCs and their Tri-Council Agency alignments (SSHRC, NSERC and CIHR) are determined by a formula, largely based upon each University’s proportion of total funding of specific programs within each of the Tri-Council Agencies.

Current CRC status:

<table>
<thead>
<tr>
<th>Year of Allocation</th>
<th>Chair Level</th>
<th>Category</th>
<th>Field</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tier I</td>
<td>Special</td>
<td>Astronomy and Astrophysics</td>
<td>Renewed (2010-17)</td>
</tr>
<tr>
<td>1</td>
<td>Tier II</td>
<td>NSERC</td>
<td>Astronomy and Astrophysics</td>
<td>Renewed (2012-17)</td>
</tr>
<tr>
<td>2</td>
<td>Tier II</td>
<td>Special</td>
<td>Atlantic Canada Studies</td>
<td>Renewed (2008-13)</td>
</tr>
<tr>
<td>3</td>
<td>Tier II</td>
<td>Special</td>
<td>Management</td>
<td>Renewed (2010-15)</td>
</tr>
<tr>
<td>4*</td>
<td>Tier II</td>
<td>NSERC</td>
<td>Environmental Studies/Material Science</td>
<td>Renewed (2011-16)</td>
</tr>
<tr>
<td>4*</td>
<td>Tier II</td>
<td>SSHRC</td>
<td>Industrial/Organization Psychology</td>
<td>Renewed (2011-16)</td>
</tr>
<tr>
<td>5</td>
<td>Tier II</td>
<td>SSHRC</td>
<td>International Development Studies</td>
<td>Refilled (2012-17)</td>
</tr>
<tr>
<td>6</td>
<td>Tier I</td>
<td>SSHRC</td>
<td>Occupational Health Psychology</td>
<td>Renewed (2010-15)</td>
</tr>
<tr>
<td>7</td>
<td>Tier II</td>
<td>SSHRC</td>
<td>Finance</td>
<td>Filled (2011-16)</td>
</tr>
</tbody>
</table>

*originally a Tier I NSERC-oriented Chair; subsequently approved for reassignment to a Tier II NSERC Chair and a Tier II SSHRC Chair

The assignment of CRCs within Saint Mary’s University is the responsibility of the Vice President Academic and Research (VPAR). The VPAR or his/her delegate(s) will review the allocation of CRCs within the University on a regular basis, and particularly when a CRC is up for renewal, at the end of a term (i.e. for Tier 2 Chairs), or when a Chair otherwise becomes vacant. CRCs may be re-assigned within the University after such a review, and re-assignments must be consistent with the University’s Strategic Research Plan.

In its October 2004 letter to the CRC Secretariat on the issue of representation of under-represented groups in Canada Research Chairs, Saint Mary’s set a target of at least two of the seven (29%) Chairs originally assigned the University to be filled by members of under-represented groups (i.e., particularly Aboriginal people, persons with disabilities, racially visible persons and women). Saint Mary’s has been allocated a further two CRCs since that time. Currently, three of our nine Chairs (33%) are filled by members of under-represented groups and the University is committed to maintaining
this as a minimum target. In its nomination process for CRCs, Saint Mary's is committed to the principles of employment equity. In 1993 Saint Mary's signed a certificate of commitment under the Federal Contractors Program to develop an Employment Equity program which strives to achieve employment equity for the four designated groups: Aboriginal people, persons with disabilities, racially visible persons and women. In 2006, the President of Saint Mary's University released a public memo on achieving equity in which he stated, “Saint Mary’s is a Community of people and in implementing employment equity we are taking advantage of the diversity in Canada and beyond.” In addition, all advertisements for CRC positions available at Saint Mary’s indicate that the University is committed to the principles of employment equity.

Our Major Research Themes

Being a smaller institution, Saint Mary’s University has taken a very strategic approach in allocating resources to enhance research activities and in allocation of its Canada Research Chairs in particular. The University’s motto, *Age Quod Agis*, or “What you do, do well”, has been a guiding principle of that strategy. The University cannot excel in all fields of research and scholarly activity and although excellent research is carried out in many disciplines beyond those identified in our Major Research Theme, the Themes reflect Saint Mary’s current research strengths and are based upon long histories of scholarly activity in the Theme areas. While many are interdisciplinary and/or multidisciplinary, all are at least multi-faceted and have researchers from multiple Departments and Faculties associated with them. All have graduate programs associated with them and a long history of engaging undergraduate students in research. Each of the Major Research Themes exemplify areas of strong collaborations, partnerships and network with other institutions to help develop or maintain excellence in its priority areas of research. Each of the Themes also exemplify Saint Mary’s long tradition of disseminating and translating the outcomes of our research to receptor communities who can best benefit from them.

Theme 1: Research for Atlantic Canada Communities:

Saint Mary’s University has a long established tradition of excellence in Atlantic Canada Studies and maintains the Gorsebrook Research Institute as the focus of such research. While based out of the Faculty of Arts, Atlantic Canada Studies research at Saint Mary’s is interdisciplinary, involving many professors from many Departments across the University. The University offers Nova Scotia’s only undergraduate degree program in Atlantic Canada Studies. The Master’s program, established in 1983, remains unique in the field. It combines social scientific, ecological, cultural, historical, and population health perspectives, and is highly research oriented. For example, faculty research supporting the development of healthy environments and community based health promotion programming has made a significant contribution to the development of health policy at the local, federal and global level.

The Gorsebrook Research Institute (GRI) was established in 1982, and has operated as a research arm of the Atlantic Canada Studies program, facilitating university and other sector research, promoting interdisciplinary and inter-university cooperation, and serving as a resource base and data centre for universities, governments, and the private sector. The research activities of the Office of Aboriginal & Northern Research within the GRI are examples of community-based and community-focused research carried out within the Institute. The Centre for the Study of Sport and Health recently
emerged from the GRI to become a stand-alone, Senate-approved research centre at Saint Mary’s. The Centre builds upon Saint Mary's University's tradition of sporting excellence and extends the growing research competence in the area of sport and health at the University that originated within the GRI.

The objectives within the Major Research Theme on Atlantic Canada Communities include:

- To contribute to the social and economic development of the Atlantic Provinces and to the health and wellbeing of Atlantic Canadians through policy-related research relevant to the region and its peoples.
- To enhance the interdisciplinary study of culture, peoples and their history, the natural environment and its resources, and health and wellbeing as it relates to and extends beyond Atlantic Canada.
- To be an Atlantic Canada resource base and data centre for universities, governments, and the private sector.
- To facilitate and enhance co-operation and collaboration between university and non-university researchers within the region and beyond.
- To enable interdisciplinary and inter-university co-operation and collaboration.
- To encourage collaborative research projects between universities and community-based groups throughout the region.
- To enhance and improve dissemination of research on Atlantic Canada Communities through publications, conferences, symposia and public forums.

To fund and further develop research within the Atlantic Canada Communities Theme, Saint Mary’s has allocated a Tier II Canada Research Chair in Atlantic Canada Studies. The University will continue to pursue funding from SSHRC, CIHR, CFI, NSRIT, NSHRF and other relevant governmental departments and agencies, as well as non-governmental funding opportunities. Saint Mary’s will continue to support research within the undergraduate and graduate programs in Atlantic Canada Studies, as well as pursue new programs in applied health outcomes, sport and wellbeing.

Expected observable outcomes of achieving our objectives under the Theme of Research on Atlantic Canada Communities will be recognition of our Canada Research Chair in Atlantic Canada Studies, the Gorsebrook Research Institute, the Centre for the Study of Sport and Health as leaders in research that contributes to social and economic development of the Atlantic Provinces and to the health and wellbeing of Atlantic Canadians by receptor communities across the region and beyond. Performance will be measured by the attraction of research funding, the output and impact of scholarly articles disseminated, and the number and success of conferences, symposia and public forums to which Saint Mary’s researchers in Atlantic Canada Studies host an/or make contributions. Student demand and the success of the MA in Atlantic Canada Studies program and its graduates will also be indicators of the performance of this Major Research Theme, and we will look for other developments in academic programming related to the research domain.
**Theme 2: Innovation in Business and Workplace Studies:**

Saint Mary’s is the leading Atlantic Canada university in Business Studies and Industrial/Organizational (I/O) Psychology and is recognized for its innovation in these fields.

The Sobey School of Business is the largest and most respected business school in Atlantic Canada. It is the only comprehensive business school in the region, offering academic and research programming at the undergraduate, Master and PhD levels. The PhD Program in Management has an international reputation for its critical management studies and research in the field of management history. Research within the School is wide ranging, but there is significant research expertise in critical management studies, management history, organizational behavior, human resource management, finance and information systems (with the latter also supported by research within the Department of Math and Computing Science in the Faculty of Science). Research in these fields is supported by our Centre for Leadership Excellence, Centre of Excellence in Accounting and Reporting for Co-operatives, and the Canadian Centre for Ethics and Public Affairs.

Saint Mary’s also hosts one of the largest and most research-active groups of I/O psychologists in North America. Housed within the Psychology Department in the Faculty of Science, academic and research programs are offered at the undergraduate, Master and PhD levels. Research foci include occupational psychology and healthy workplace studies. This area is supported by and provided leadership the CN Centre for Occupational Health and Safety, and regional leader and internationally recognized centre for research in occupational health and safety including occupational health psychology.

The objectives within the Major Research Theme on Innovation in Business and Workplace Studies (including Management, Finance, and Information Systems) include:

- To take a national leadership position in Human Resource Management and Industrial/Organizational (I/O) Psychology in recognition of its vital importance to a knowledge-based economy.
- To further foster research in finance with a multidisciplinary reach that will help develop an in-depth understanding of the financial markets and the decision making processes in order to optimize the interaction of corporations with their environment and enhance investor’s education.
- To foster and further develop research on information systems and technology that will help local, regional, and national businesses and entrepreneurs be more successful in the marketplace.
- To continue to excel at research psychological health in the workplace, with particular attention to job-related stress, coping mechanisms and balanced-living strategies.
- To transfer new research findings on the workplace to academic and business communities locally, regionally, nationally and internationally.

To fund and further develop research within this Major Research Theme, Saint Mary’s has allocated four Canada Research Chairs, the largest number of our CRCs allocated to a single Theme. These include a Tier I CRC in Occupational Health Psychology, a Tier II CRC in Industrial/Organization Psychology, and
Tier II CRC in Management and a Tier II CRC in Finance. The University will continue to pursue funding from ACOA, SSHRC, CIHR, NSERC, CFI, NSRIT, NSHRF and other relevant governmental departments and agencies, as well as non-governmental and private-sector funding opportunities to support the Major Research Theme on Innovation in Business Management, Finance, Information Systems, and Workplace Studies. Research in the Information Sciences has particular opportunities for opportunities with and investment from the private sector, which can be facilitated by our ILO.

Expected observable outcomes of achieving our objectives under this Major Research Theme will be recognition of our Canada Research Chair allocated to the Theme as leaders in research that contributes to the success of local, regional, and national businesses and to the psychological health and wellbeing of the people that work for these businesses. We will also look for recognition of the CN Centre for Occupational Health and Safety and the Centre for Leadership Excellence to maintain their statuses as regional leaders in their research domains, and have an increasing impact on the national scene. Performance will be measured by the attraction of research funding, the output and impact of scholarly articles disseminated, and the number and success of conferences, symposia, workshops, consulting activities and public forums to which Saint Mary’s researchers contributing to the Major Research Theme host an/or make contributions. Student demand and the success of the relevant graduate research-based programs (e.g., the PhD in Business Administration - Management, the PhD in I/O Psychology, the Master of Applied Psychology) and their graduates will also be indicators of the performance of this Major Research Theme. We will look for and assess other opportunities for the development of new academic and research programming related to the Theme.

Theme 3: The Environment and Natural Resources:

Research on environmental issues and the sustainable management and harvesting of our natural resources is pursued by researchers from many Departments across the University.

Within the Faculty of Science, there is current research strength in: monitoring chemical pollution; development of new remediation technologies; synthesis of environmentally-benign chemistry for industrial processes; biodiversity; environmental toxicology; parasites, fungi and pests; and biological and molecular technology to enhance agricultural production. There is also significant expertise in identification and characterization of onshore and offshore geological resources including hydrocarbons and minerals. The Faculty of Science hosts Saint Mary’s Atlantic Centre for Green Chemistry (ACGC) and the CFI/NSRIT-funded Centre for Ecosystem Monitoring and Remediation (CEAR) and the Regional Geochemical Centre (RGC). Research in the Departments of Biology, Chemistry and Geology, the Division of Engineering, and the Environmental Science Program contribute to this Research Theme. While addressing and being well connected to local and regional environmental issues, Saint Mary’s researchers in these fields are also well connected with research programs in countries around the world, including China, Mongolia, Vietnam, Mexico and Japan.

Within the Sobey School of Business (SSB), environmental research funded focuses on fisheries management and the relationship between corporate strategy and sustainable development. There is ongoing research capacity in environmental accounting, corporate responsibility, and the economic aspects of governmental regulation of the environment. This research has been funded by SSHRC,
NSERC, and other agencies, and has included several large and prestigious SSHRC Community-University Research Alliance (CURA) and SSHRC Partnership grants.

In the Faculty of Arts, the Department of Geography provides a particular focus on environmental studies and research. The Maritime Provinces Spatial Analysis Research Centre (MP_SpARC) was established at Saint Mary’s with support from CFI/NSRIT for spatial analysis research infrastructure (GIS, positioning systems, and 3-D seismic analysis). Current research is focused on the impact of climate change and renewable energy generation systems on coastal systems and rivers, as well as citizen-based science approaches to environmental monitoring. In addition to the geographers, researchers in sociology, Atlantic Canada Studies and other disciplines contribute to environmental including better understanding relationships between human health and the environment.

The objectives within the Major Research Theme on Research to Enhance our Environment and to Responsibly Harvest and Sustain our Natural Resources include:

- To continue to strengthen capacity of the University to carry out disciplinary and interdisciplinary research on environmental and natural resource issues relevant to Atlantic Canada and beyond, with particular emphasis on work involving an integration of technical/scientific issues with management/policy and community participation issues.
- While being attentive to social and community needs, apply the highest scientific rigour and best methodologies to improving natural resource management, utilization and conservation in Atlantic Canada and elsewhere.
- To strengthen research capacity in sustainable development in resource industries.
- To collaborate with external partners (in both the public and private sectors) in research and transfer the outcomes of our research on environmental and natural resource issues to receptors communities that can best benefit from them, including where appropriate, the transmission of products and processes generated from our research into the marketplace.

Professors from across the University are engaged in the supervision of graduate students involved in environmental research within the MSc in Applied Science and the MA in Atlantic Canada Studies programs as well as both the Environmental Studies (Faculty of Arts) and Environment Science (Faculty of Science) programs, under the new rubric of the School of Environment at Saint Mary’s. Saint Mary’s will continue to help support the research of graduate students in these programs with internal funding for student stipends. Opportunities for new graduate programming and research exist and are being pursued within this Research Theme, including an MA in Geography and a PhD in Applied Science.

A Tier II Canada Research Chair has been allocated to this Research Theme, currently in the field of Environmental studies/Material science. Opportunities exist and will be pursue for Industrial Research Chairs for more applied research fields within this Theme, especially in the areas of geology and chemistry. Funding in support of the Theme will continued to be pursued through CRC, CFI, NSERC, SSHRC, NSHRF, NSRIT and other funding agencies. This Theme is particularly well placed to access increased funding through non-traditional sources funding sources in the private sector, and these funding opportunities will be pursued and facilitated through our Industry Liaison Office.
Expected observable outcomes of achieving our objectives under this Major Research Theme will be recognition of our researchers, and the Canada Research Chair allocated to the Theme in particular, as leaders in research that contributes to environmental sustainability and responsible management and harvesting of our natural resources. We will also look for further development and recognition of the Atlantic Centre for Green Chemistry as regional leader in this research domain. We will look to capitalize on opportunities for the establishment of Industrial Research Chairs with responsible external partners. We will assess student demand and look to develop more programs at the graduate level to increase our research activity in this area, including a Master’s program in Geography and an interdisciplinary PhD in Applied Science. Performance will be measured by the attraction of research funding, the output and impact of scholarly articles disseminated, the number and quality of intellectual property disclosures and mobilization of these disclosures into receptor communities, and the number and success of conferences, symposia, workshops, and public forums to which Saint Mary’s researchers contribute within this Major Research Theme.

Theme 4: Research in Astronomy, Computational Sciences, and Subatomic Physics:

Saint Mary’s University has a long history in Astronomical research, which in more recent times has evolved into a particular strength in Computational Astrophysics. Strength in the Computational Sciences also comes from our researchers within the areas of Chemistry, Computing Science, Information Systems, Math and Physics. Also emerged in more recent times is strength in Subatomic-Physics.

Our Department of Astronomy and Physics is the regional leader in Astronomy and Subatomic Physics and an important player in these fields on the national scene. The first application to CFI made by the University was for a high-performance computing facility to support research in Astronomy and other areas of computational science. Saint Mary’s was a founding member and continues to be an important member of the Atlantic Computing Excellence Network (ACEnet), the CFI and provincially-funded, regional high performance computing (HPC) facility. Saint Mary’s in an important infrastructure and functional hub for ACEnet and our facilities include a $4M “data cave,” a 3-D visualization centre. In the area of Subatomic Physics, Saint Mary’s University has been an Associate Member of TRIUMF, Canada’s National Laboratory for Particle and Nuclear Physics, since 2004, and has contributed significantly to the research, experimental infrastructure (including a major CFI/NSRIT award), and management of that facility. Astronomy and Physics is one of the most research intensive Departments within Saint Mary’s University.

The Institute for Computational Astrophysics (ICA) was formed to expand an area of expertise within the Department of Astronomy and Physics at Saint Mary’s University. Created in 2001 as a Senate-approved research centre at Saint Mary’s, the ICA host faculty members, Master and PhD students, and post-doctoral fellows from both within Saint Mary’s and from other Universities around the world. The ICA promotes research in computational astrophysics through the research and publication activities of the individual members, by hosting visitors and colloquium speakers, and by having all its members participate in national and international conferences.
The objectives within the Major Research Theme in Astronomy, Computational Sciences, and Subatomic Physics include:

- To further develop the Institute of Computational Astrophysics as a national centre for this field
- To further develop research opportunities for undergraduate, Master and PhD students, post-doctoral and visiting researchers within the fields of Astronomy, Computational Sciences, and Subatomic Physics
- To take full advantage of the research opportunities flowing from Saint Mary’s being a major node in the regional high performance computing network (ACEnet) and to further develop our involvement in the national HPC consortium, Compute Canada.
- To further develop our relationships with TRIUMF, the Thomas Jefferson National Accelerator, and other centres of research for subatomic physics.
- To further develop our relationships with researchers in the computational sciences and subatomic physics at other Universities and Institutions in the regional, the nation, and internationally.

Researchers in the areas of Astronomy, Computational Sciences, and Subatomic Physics, have opportunities to host graduate student researchers at the MSc and PhD levels within our MSc in Applied Science, MSc in Astronomy and PhD in Astronomy programs. These programs have been very successful at finding funding from external granting agencies to support graduate students, as well as post-doctoral fellows. Saint Mary’s will look to continue to support these programs with internal funding for graduate student stipends. It is also anticipated that new opportunities will arise for graduate student research at the PhD level in some fields of Computational Sciences and Subatomic Physics as the PhD in Applied Science continues to be developed.

To fund and further develop research within this Major Research Theme, Saint Mary’s has allocated two Canada Research Chairs, one at the Tier I level and one at the Tier II level. Saint Mary’s also provides significant support to the Institute of Computational Astrophysics. Faculty members working in Astronomy, Computational Sciences, and Subatomic Physics, have been extremely successful in funding competitions from CFI/NSRIT and NSERC. Saint Mary’s has contributed significantly to these initiatives and will continue to do so. The environment for high performance computing is particularly dynamic in Canada, and Saint Mary’s will work to continue to have a leadership role in this area both regionally and nationally.

Expected observable outcomes of achieving our objectives under this Major Research Theme will be recognition of our researchers, and our Canada Research Chairs in particular, as leaders in research in Astronomy, Computational Sciences, and Subatomic Physics. We will look for more development within the ICA, particularly for a great role and more formal alignment with researchers and research institutions external to Saint Mary’s. We will look for further enhancement of our relationship with TRIUMF and other centres of research for subatomic physics around the world. We will look to develop more opportunities for graduate student research in the computational sciences and subatomic physics, particularly at the PhD level. Performance will be measured by the attraction of research funding, the output and impact of scholarly articles, the success of our research students in
these fields, and the number and success of conferences, symposia, workshops, and public forums to which Saint Mary’s researchers contribute within this Major Research Theme.

Theme 5: Research in International Development and Human Migration Issues:

Saint Mary's University has been actively involved in International Development Studies research and academic programming since the mid 1980's. The program is interdisciplinary and has grown to embrace faculty members from disciplines in Arts, Commerce, and Science. The research area enjoys a major international reputation and its research record is extensive, with broad and deep support from granting many granting agencies, including SSHRC, IDRC, CIDA, and others. International Development Studies has, as well, been particularly important to the University in terms of "internationalizing" the campus. The MA in International Development Studies is one of the largest graduate programs at the University. The recently introduced PhD in International Development Studies is unique in the region and, at the time of its introduction, only one of two programs offered at the PhD level in Canada.

Saint Mary’s has also been involved in research in human migration issues for a long time, and for the past nine years was a lead University for the Atlantic Metropolis Centre (AMC), a centre for excellence for research on immigration, integration and cultural diversity. The AMC was a consortium of academic researchers, government representatives, and non-governmental organizations dedicated to pursuing policy-relevant research related to immigration, population migrations, and cultural diversity. It pursued research agendas distinctive to the Atlantic region, as well as research programs addressing the national policy priorities of The Metropolis Project. The AMC was networked with four other Canadian Metropolis Centres of Excellence in Montreal, Toronto, the Prairies, and Vancouver, as well as with the international arm of the Metropolis Project, involving partnerships with researchers, policy makers and community organizations in over 20 countries. Saint Mary’s lead role in the Atlantic Metropolis Centre has resulted in the building up of capacity and commitment to immigration research among faculty and students, the development of wide range of community partnerships and scholarly networks, and considerable momentum for future research in this field.

The objectives within the Major Research Theme on International Development and Human Migration Issues include:

- To facilitate research opportunities for faculty, undergraduate and graduate students, post-doctoral fellows, and visiting researchers in a wide range of international development research within the political economy of globalization by emphasizing gender, the environment, rural social movements, migration, development theory, labour, or any combination of the foregoing.
- To facilitate research opportunities for faculty, undergraduate and graduate students, post-doctoral fellows, and visiting researchers in a wide range of issues related to human migration, including research of immigration, population migrations, economics, education, and cultural diversity – particularly as it applies to the Atlantic Canada experience.
- To produce tangible and significant research outcomes that are adopted in international development and human migration policies.
• To utilize our research in international development and human migration issues to further the of internationalization of our campus and to strengthen and develop new research relationships and partners external to our campus.
• To disseminate the results of our research international development and human migration issues through the most effective means to maximize the impact of this research.

Researchers in the areas of International Development have opportunities to host student researchers at the undergraduate, Master and PhD levels within our International Development Studies Program. Scholars working on Human Migration Issues can host undergraduate and Master levels research students in numerous programs (e.g. Atlantic Canada Studies, Economics, History, Philosophy, Religious Studies, Sociology and Criminology, and Women and Gender Studies). Saint Mary’s will look to continue to support these programs with internal funding for graduate student stipends and pursue support for these student researchers from external funding agencies.

To fund and further develop research within this Major Research Theme, Saint Mary’s has allocated a Tier II Canada Research Chair in International Development Studies. Faculty members working in International Development and Human Migration issues have been very successful in securing funding from SSHRC, CIDA, IDRC and other external funding agencies. The International Activities Office of Saint Mary’s has a very long history and continued success in facilitating research and development opportunities for faculty and students around the world. We will continue to look for opportunities in these areas which are so well aligned to Saint Mary’s long history and on-going extensive activities internationally.

Expected observable outcomes of achieving our objectives under this Major Research Theme will include recognition of our researchers, including our Canada Research Chair in International Development Studies, as leaders in the area of International Development and Human Migration Issues. We will monitor student demand and the success of graduates from our newly developed PhD in International Development Studies as well as the many other graduate programs that facilitate research in these areas. We will look for further development and enhancement in research of Human Migration Issues which Atlantic Metropolis Centre provided such an excellent focus for this research at Saint Mary’s. Performance will be measured by the attraction of research funding, the output and impact of scholarly articles, the success of our research students in these fields, and the number and success of conferences, symposia, workshops, and public forums to which Saint Mary’s researchers contribute within this Major Research Theme.