

**Memorial University of Newfoundland**

**Strategic Research Plan**

**for the**

***Canada Research Chairs* program**

**and the**

***Canada Foundation for Innovation* program.**

**Summary**

**September 1, 2000**

Memorial University is the only university in Newfoundland and Labrador.

The University is shaped and sustained by the highest standards of contemporary research, and by the people, economy, location and history of its community.

More than 50 per cent of all the research and development undertaken in Newfoundland and Labrador is performed by researchers at Memorial University.

Memorial University is committed to excellence in teaching, research and scholarship, and service to the general public. Its mandate involves undertaking research on the challenges facing the province and sharing its expertise with its community.

This Strategic Research Plan for Memorial has been designed to promote and enhance basic and applied research, and to take advantage of the aspects of the University's location and community.

## **The Goal**

The goal of Memorial University's Strategic Research Plan for the *Canada Research Chairs* program and the *Canada Foundation for Innovation* program is to develop and sustain major, internationally recognized research in four thematic areas: Ocean and Coastal Studies; Industrial Development and Environmental Sustainability; Health; and North Atlantic/Newfoundland and Labrador Studies.

Memorial's goal is to double its research capacity in each of these four areas over the next five years. The University's goal is to be recognized internationally for its high calibre research capacity in these thematic areas.

## **Implementation**

Implementation will be effected in the context of the broader research agenda and aspirations of the university community, especially in light of the major faculty renewal that is anticipated at Memorial over the next decade. The foundations of the Plan will ensure that the continuum of basic and applied research at Memorial and the communication of these outcomes will be fully developed.

Appropriate exchange of knowledge to foster improved socio-economic and cultural development, to inform public policy, and promote efficiencies in the use of public resources, will be achieved.

## **Consultation**

This Plan has been developed through wide consultations, involving Memorial's Research Council, representatives of faculties and schools, the University's Planning and Budget Committee

and the Senior Executive Committee. Its implementation will give operational effect to selected areas of the broader university research agenda.

### **Students**

Over the past number of years, Memorial University has made a significant investment in the support of student research. Providing support for developing researchers will be a fundamental aim of the university in the future development of its research agenda.

### **Allies and Partners**

Implementation of the Strategic Research Plan will foster arrangements with allies and partners, both internal and external to Memorial University.

Opportunities for partnering with regional and national agencies will be pursued vigorously, as will partnerships with the private sector and community-based organizations.

Partnerships already formed with departments of the provincial government and regional development agencies will be enhanced.

The Atlantic Investment Program and the Atlantic Innovation Fund will enable Memorial to develop additional means to support both infrastructure and capacity building. This will enrich Memorial's current collaborations with sister institutions and the private sector.

### **Individuals and Groups**

Where strategically desirable, sharing of resources and interdisciplinary approaches to major research questions will be encouraged.

Memorial University recognizes that core disciplinary competencies must be developed and sustained, and that the unique ability and approaches of a single investigator can have as much impact on a field of study as team approaches to certain problems. The recognition of these core values and provision of a supportive environment for both individual and team research will be fundamental to the successful future development of internationally recognized research strengths at Memorial.

## **Thematic Research Areas**

### ***Oceans and Coastal Studies***

Over the five decades of its existence, Memorial University has taken advantage of its location to build outstanding expertise in the physical, biological, socio-economic and cultural aspects of our ocean environment. A range of disciplines and faculties embrace these studies in the sciences, engineering, social sciences and the humanities. The areas targeted for additional key investment under this theme are: Aquaculture and Marine Biotechnology; Ocean Resources and Oceanography; and Ocean Engineering and Structures.

### ***Industrial Development and Environmental Sustainability***

Exploitation of natural resources – fishing, mining, forestry and the oil and gas industry – has been key to the economic life of Newfoundland and Labrador and the Atlantic region. The continued sustainability of these resources is critical to the economic and social well-being of Canada. Enhancement in Memorial University’s research capacity is planned in the advanced areas of Fishing, Forestry and Mining. The Oil and Gas industry will be supported by research that will enable Memorial to become a global leader in this area.

Economic diversification is crucial to the future of the province. Memorial University plays a pivotal role in this diversification through its current and future research capacity and by preparing people to fully participate in the new knowledge-based economy. The University has been a leader in telemedicine and telelearning. Memorial has developed high performance computational and communications technologies to enable research at the highest level.

Memorial University intends to capitalize on opportunities presented by its location to build strengths in Biotechnology, especially Marine Biotechnology.

Small-scale manufacturing of a diversified array of products is emerging as an important contributor to the provincial economy. Memorial University will strengthen its ability to support this sector through strategic deployment of “platform” capacities.

Memorial University has established a strong core capacity for interdisciplinary studies which embrace socio-economic, biological, physical and health concepts of the environment. These will be encouraged and strengthened under this Plan.

Continued development of the University’s capacities to examine the socio-cultural aspects of the economy and new technologies is integrated into the University’s Strategic Research Plan.

Memorial will help equip the province and the region for the exploitation of these sectors in

an ethically sound and environmentally sustainable fashion. The areas that will be explored include: Fishing, Forestry and Mining; Oil and Gas; Information Technology; Biotechnology; Manufacturing; and Environmental Sustainability.

### ***Health***

Memorial University is committed to promoting the health of individuals and the population in this region through research. The University has developed internationally recognized core strengths in the research areas of Basic Sciences, Health Services and Systems, and Applied Clinical Research.

Memorial University wishes to enhance its basic research programs and draw on strengths in the areas of Immunity and Infection, Stroke, Neuroscience, Cell Proliferation and Cancer, and Metabolism and Nutrition. Emerging strengths in Pharmacy and Genetics cross several of these programs.

In addition to the development of new integrated communication and media technologies, Memorial University will also focus its research on issues associated with ehealth, such as regulations, information systems and integrated practice through distance.

In the field of Human Genetics, Memorial University will continue to develop its strengths and explore the ethical and legal implications of this research.

The University will also strengthen its capacity and promote disciplinary and interdisciplinary studies in Bioethics and the Society, Culture and Health of Populations.

### ***North Atlantic/Newfoundland and Labrador Studies***

Newfoundland and Labrador has a remarkable socio-economic and cultural history. The province's population is long established. Its physical environment rewards resilience, as do challenges to public resource allocation and public policy development.

Memorial University will strengthen its research in archeology, cultural ecology, linguistics and the cultural milieu of Newfoundland and Labrador to sustain a world leading authority in these areas.

The challenge of developing public policy and practice that reflect a broad range of social and economic issues will be pursued in the context of the province and how these issues relate in an international context.

As an "essential university" for its community, Memorial has developed a proud tradition of support for the humanities. This essential core of humanities scholarship will continue to be a

priority and will be supported in this Plan under the area of Textual Studies.

The province of Newfoundland and Labrador presents a unique opportunity for the promotion and development in the field of Fine Arts, including both visual and performing arts. Research capacity in these areas are essential to the nature of Memorial University and will form a part of future strategic developments.

### **Allocation Process**

A process to determine the internal allocation of Canada Research Chairs has been established at Memorial University.

Deans and Directors submit proposals which are vetted by an advisory committee consisting of the Dean of Graduate Studies, the principal of Sir Wilfred Grenfell College, Memorial's campus in Corner Brook, Newfoundland, and four senior university researchers.

This committee will make recommendations to the University's Vice-President (Academic), Vice-President (Research and International Relations) and President regarding applications to be forwarded to the *Canada Research Chairs* program for consideration.

The proposals are judged against an agreed set of criteria that meet the priorities of the *Canada Research Chairs* program and the University and that are consistent with the longer term plans of the faculties and schools.