University of Ottawa

Strategic Areas of Development in Research

uOttawa

The University of Ottawa is at a crucial stage in its development as a research-intensive institution. Its size and breadth – comprising a wide range of undergraduate, graduate and professional programs – as well as its location in the nation's capital, its cosmopolitan population, its bilingualism and, above all, its strong commitment to research, create a vigorous and dynamic research environment within and among all faculties and disciplines. The high quality and sheer quantity of research in discipline-based areas, as well as in interdisciplinary research groups are evidenced by the dramatic growth in research funding, and by the national and international dissemination and recognition of research results.

In its strategic plan, *Vision 2010*, the University pledges to increase research activities, with an aim to place the University among Canada's top five in research. This goal is not only important for the reputation and status of the University, but also for the University's ability to fulfill its mandate to further knowledge and contribute to the common good.

To achieve this goal, research must continue to develop on three planes. Sustained disciplinary and interdisciplinary research must continue, often in the form of long-term projects that contribute to our knowledge in a given field; new and potentially significant areas of research must be identified and nurtured; and strategic areas of development, identifying a small number of present priorities, must be established.

This document addresses the third of these requirements. While the University continues to foster and support basic and applied research in all of its domains, *Vision 2010* calls upon the University to review and renew the strategic areas of development to include emerging fields. To this end, the University has identified a number of key areas that are critically and strategically important provincially, nationally and globally. While these strategic areas cover only a portion of the numerous and varied research interests of our researchers, their interdisciplinary nature invites participation from members of all faculties at the University.

Areas identified as research priorities can expect to receive attention in the form of funding and development, but they also have important responsibilities: to attract significant external funding in the form of grants, contracts, donations and external partnerships; to devote considerable resources to the training of students, particularly at the graduate level; and to disseminate knowledge widely within the academic community, to policy-makers as appropriate, and to the broader public.

Canada and the World

Given its bilingualism, its bijural tradition and its location in the nation's capital, the University of Ottawa naturally places a high research priority on issues and themes pertaining to Canada, Canada's place in the world, and its response to global challenges. Issues related to francophone communities in Canada, especially in Ontario, are an important priority for the University. Included in this area is a broad array of pressing cultural, social and ethical issues, alongside those pertaining to politics and policy. These themes touch on the core endeavours of all faculties at the University:

- Human rights
- la Francophonie
- Sustainable environment
- Governance and public policy
- Official languages and bilingualism
- Bijuralism

Health

Health has long been an area of strength in research and education at the University of Ottawa. The themes reflect a multifaceted approach, encompassing research based on four pillars: biomedical, clinical, health systems and services, and population and public health. Traditionally focused in medicine and health sciences, the study of health is rapidly becoming a multidisciplinary pursuit, engaging business and legal expertise, the humanities and social sciences, as well as the natural sciences and engineering:

- Population health
- Women's health
- Health promotion and health care
- Neurosciences
- Cardiovascular sciences
- Regenerative medicine

e-Society

Over the past ten years, the University of Ottawa has developed significant strength in information and communication technology. These technologies enable innovation in many fields, such as health, scientific discovery, business, education, Internet law and the visual arts. Understanding the social, cultural and legal impacts of the evolution towards an e-society is an important theme within this area:

- Enabling technologies
- e-transactions
- Digital media and communications
- Safety and security
- Technology and society

Molecular Sciences

The convergence of technologies at the unit level (bits, atoms and genes) has the potential to generate important innovations in health, the treatment of diseases, and the environment, among other areas. At the same time, the ethical, legal and regulatory challenges posed by the power of these technologies are increasingly important, involving research in medicine, health sciences, science, business, law and the arts:

- Molecular and systems biology
- Biopharmaceuticals
- Catalysis and nanotechnology
- Environmental genomics