An innovative Faculty; a vibrant and vital academic community

2014-2018 ACTION PLAN
The University of Ottawa’s strategic plan: a cornerstone for the Faculty of Health Sciences’ action plan

The University of Ottawa is one of Canada’s leading universities.

The University’s strategic plan, Destination 2020, presents the institution’s choices and commitments, as well as its strategic goals. Vision, mission and strategic goals are the plan’s building blocks, and, once rolled out throughout the University, they will allow the institution to consolidate its achievements and maintain its development.

**Vision – Destination 2020**
The University of Ottawa will offer an unparalleled university experience and, through outstanding teaching and research, play a vital role in defining the world of tomorrow. We will instill in each of our graduates an ethic of service, a culture of engagement and an awareness of shared responsibility that will prepare them for global citizenship.

This vision is based on a well-defined role expressed in the University’s mission, which highlights its unique features, including bilingualism, excellence of scholarships, among others.

**Mission — Destination 2020**
We are unique because of our location in the heart of the nation’s capital, our bilingualism and commitment to the promotion of French culture in Ontario, and the excellence of our scholarship. As a research-intensive university, we provide our students with an outstanding education and enrich the intellectual, economic and cultural life of Canada, helping our country play an important and valued role among the nations of the world.

The actions of the University, as they appear in its strategic plan, are the following:

1. Enhance our students’ experience by enriching both the teaching and learning environment;
2. Deepen our research efforts and broaden their contribution to society;
3. Strengthen our unique role in the Francophonie and in the advancement of bilingualism;
4. Aim for greater internationalization in our teaching and research programs;
5. Strategically plan our student growth to meet our goals while responding to the increasing need for university access in Ontario;
6. Hone the attributes that are essential to our mission while undertaking new strategic ventures that will inspire and motivate our University community.
In addition to these goals, the University is committed to carefully managing all it undertakes by using resources wisely and making every effort to find new sources of revenue.

*Drawn from Destination 2020 ([destination2020.uottawa.ca](http://destination2020.uottawa.ca)).*

The vision, mission and goals of the University were the guiding principles when preparing the Faculty of Health Sciences’ 2014-2018 action plan. They helped ensure we aligned the activities and contributions of the Faculty with those of the University, all while focusing on the common goal of raising the University’s profile in Canada and around the world.

### 2. The Faculty of Health Sciences at a glance

The Faculty of Health Sciences’ five academic units are devoted to nursing, nutrition sciences, rehabilitation sciences, human kinetics and the interdisciplinary study of health sciences. It is the third-largest faculty at the University of Ottawa, with nearly 4,700 students and 700 support and teaching staff.

Eight-five percent of our students are studying at the undergraduate level and can choose from six bachelor’s programs. The other 15% are studying at the graduate level in one of 10 master’s programs or three doctoral programs.

The Faculty excels in the area of research thanks to some 100 researchers working in various fields—from molecular biology and metabolism to human kinetics, from professional development and social sciences to the integration, dissemination and application of knowledge on individual and population health. The Faculty is home to several designated research centres as well as a number of external and internal University research chairs that contribute to its research excellence:

- **Research centres:**
  - On nursing best practices
  - On sport in Canadian society
- **Canada Research Chair in Qualitative Health Research with Marginalized Populations**
- **University Research Chairs:**
  - On forensic nursing
  - On evidence-based practice in rehabilitation
  - On environmental physiology
  - On knowledge translation to patients
  - On Canadian francophonie and health
- **Research Chair in Public Health Nursing Loyer-DaSilva**
- **Chair in Nursing Care of Children, Youth and Families (with CHEO)**

The Faculty has successfully drawn on its teaching and research expertise to develop initiatives that make a real difference in the community.

The Faculty of Health Sciences is unique among faculties of U15 universities due to the quality and diversity of its 23 programs, offered in French and English, at the undergraduate and graduate levels, and through the high-calibre research it supports. Nevertheless, it operates in an extremely competitive academic environment.
Through the students it trains and its research activities, the Faculty must meet the demands of a health care field marked by significant changes (innovation and discoveries, increased health care costs, interdisciplinary practices, etc.). The 2014-2018 action plan was developed to respond to these significant challenges and help the Faculty implement the elements needed to ensure its success in the coming years.

3. Development approach for the 2014-2018 action plan

We are proud to present our 2014-2018 action plan. Launched in November 2013, this plan is the result of a focused and rigorous exercise conducted by the Dean’s Office, directors of the academic units and many other members of the teaching and support staff (see Appendix 1 for a list of the members who met regularly to bring this process of reflection to fruition). These individuals not only provided expertise in diverse areas but also played an essential role in documenting and consolidating the concerns and suggestions of colleagues in various academic and administrative functions across our academic units.

Progress on the plan was presented at faculty assemblies at various points during its development, and the plan as a whole received assembly support following several presentations in May and June 2014.

By responding to the challenges the Faculty of Health Sciences faces, this plan equips the organization with an ambitious vision, one that sets us apart and grounds the Faculty solidly within the University and the community, by focusing on Innovation and Excellence.

4. Background

In recent years, the Faculty of Health Sciences (FHS) has sought to strengthen its position as a faculty that responds proactively to scientific advances as well as to the rapid, frequent and profound changes that health systems are experiencing (increased innovation and a greater focus on prevention, increasing costs, interdisciplinary care procedures, the diverse settings in which services are delivered, etc.). By training researchers, professionals and decision makers who have contact with multiple disciplines, by concentrating on innovative and collaborative research focused on the patient and the person and by establishing partnerships with the community, the Faculty aims to be a major contributor in adjusting to these challenges.

To accomplish this, the Faculty has prioritized the following goals in recent years:

1. Anticipate and develop the infrastructure needed to support discipline-specific and interdisciplinary learning based on research results;
2. Increase research contributions and the excellence of teaching and the learning experience;
3. Offer all FHS students opportunities for interdisciplinary and interprofessional training;
4. Become better acquainted with, raise awareness on and show greater recognition for our researchers and their work;
5. Improve support for research;
6. Increase student involvement in research activities;
7. Increase cooperation within the Faculty and foster a sense of belonging;
8. Better serve the community (at the Faculty and throughout the University);
9. Increase our international presence to advance common interests and enrich learning; and
10. Strive to improve our business processes.

A recent review of the Faculty and its achievements indicated that we should focus some of our energy and resources on four priority areas: academic programs, research, developmental projects and operations and their effectiveness and efficiency. Four working areas were put in place to establish the action plan:

♦ ACADEMIC PROGRAMS: Examine our programs for any potential or existing areas of overlap and evaluate the possibility of developing a common core curriculum; cultivate the unique qualities of each school to elevate the Faculty as a whole;

♦ RESEARCH: Establish the strengths of the Faculty (through a gap analysis with the goal of maintaining our position as one of the best and increasing our competitiveness) in the area of research topics as well as training programs and contribute to raising the profile of the University;

♦ DEVELOPMENTAL PROJECTS: Identify developmental projects that would facilitate bringing the academic units together and would engage them in functioning cooperatively to promote the Faculty’s positioning in niches of excellence;

♦ OPERATIONS AND EFFICIENCIES: Review our academic human resources management processes and approaches with a view to increasing efficiency and the involvement of members of the Faculty in its development (commitment and accountability).

The 2014-2018 action plan was developed around these working areas and is broken down into annual goals that are defined annually. Progress is reviewed on a quarterly basis by the team at the Dean’s Office.
5. 2014-2018 action plan: Academic programs

The University of Ottawa offers a wide variety of programs. In order to meet its goal of providing one of the best and richest student experiences possible, the University strives for continuous improvement of its programs. The Faculty of Health Sciences is fully committed to this approach and wishes to contribute actively to the process. To this end, it undergoes regular cyclical evaluations of its programs in order to meet the accreditation requirements of the Ontario Ministry of Training, Colleges and Universities and various professional bodies.

Among the challenges the Faculty faces is potential duplication of content across several of its programs, a situation that is undesirable for both our students and our academic units as it makes programs more difficult to manage, reduces opportunities for expanding programs and creating new ones and is not conducive to cooperation between academic units or to creating cross-sector initiatives. All of these elements are indeed necessary, particularly given interdisciplinarity has essentially become the “theme song” of a changing health care system.

Another issue has been uncovered at the graduate level. The University and the Faculty are research intensive, and a strong emphasis is placed on master’s and doctoral programs with the goal of significantly increasing enrollment numbers. It is critical for the Faculty of Health Sciences to review its practices so that it can meet this objective and to offer attractive and competitive programs.

The proposed plan focus on the quality and uniqueness of the programs offered by the Faculty, on creating synergies between programs and academic units and on actively promoting all programs—particularly graduate programs.

We expect this plan will greatly improve the educational offerings of the Faculty while clarifying its key areas of activity and set the stage for partnerships with other faculties. We hope the plan will provide the means so both teaching staff and students can work in a highly productive environment. Finally, it will create a teaching culture and faculty unique among its Canadian counterparts.

*Current initiatives*

**PhD in Population Health** – Following the University’s decision to relocate all doctoral programs not affiliated with a discipline-specific faculty, the FHS is preparing for taking on the doctoral program in population health in the fall of 2014.

**Epidemiology and public health** – The links between health care approaches and interventions for both research and education are at the heart of the FHS; take, for example, the development of a Faculty Multidisciplinary Health Care Clinic and Testing Centre and the Faculty’s Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity” (see Appendix 3 for more on these developmental projects). The FHS and its Interdisciplinary School of Health Sciences are currently reviewing a proposal from the Faculty of Medicine for the creation of a school of epidemiology and public health in order to present suggested changes to the proposal to take into account the unique strengths and complementary areas of expertise of researchers from both the department of epidemiology and the FHS. The revised proposal should, among other things, increase and improve contributions by both groups to the doctoral program in population health.
PhD in gerontology – The FHS and its Interdisciplinary School of Health Sciences are interested in proposing a new doctoral program in gerontology. This proposal would complement the creation of the “International Longevity Center—Canada” at the FHS (creation to be confirmed by the World Alliance in October 2014). The Faculty of Social Sciences has agreed to be a partner in developing and implementing this program.

Nurse practitioners – The FHS is continuing discussions with Glendon College to expand its nurse practitioner program in French through the School of Nursing.

Goal 1: STRENGTHEN THE QUALITY AND UNIQUENESS OF OUR PROGRAMS

Strategic actions:
1. Compare the quality and uniqueness of our undergraduate and graduate programs with those of other institutions in Canada.
2. Identify the priorities put forth by each academic unit.
3. Improve and streamline the process for implementing changes.
4. Bridge the gap between the current and desired levels of quality and uniqueness.

Goal 2: CREATE FULL COOPERATION ACROSS THE FACULTY’S VARIOUS PROGRAMS

Strategic actions:
5. Develop shared courses or course components.
6. Make the most of the expertise of faculty members and other individuals and increase collaboration among them in program delivery.
7. Integrate interdisciplinarity in teaching and learning activities.

Goal 3: ENCOURAGE STUDENTS TO CONSIDER GRADUATE STUDIES

Strategic actions:
8. Put together an accurate picture of students’ paths in each of the programs.
9. Create a profile of the type of graduate student sought.
10. Identify the factors that hinder and encourage consideration of graduate studies.

Goal 4: DEVELOP A TARGETED STRATEGIC ENROLLMENT MANAGEMENT PLAN

Strategic actions:
11. Present a plan for recruiting targeted groups of students.

Details of strategic actions for year 2014-2015 are presented in section 9.
6. 2014-2018 action plan: Research

The University of Ottawa’s goal is to rank among the top five universities in Canada. To accomplish this, it is committed to consolidating its areas of expertise and promoting emerging research fields.

This approach will guide the Faculty of Health Sciences in the actions it takes to harness the full potential of its research activities. The Faculty has nearly 125 positions for regular professors and researchers spread across its various academic units. For many of its disciplines, the FHS is a leader among Canada’s top 15 universities (U15). While this positioning is generally promising for the Faculty, the Faculty must nevertheless resolve issues in these areas:

- Attract and retain the best and brightest researchers and students;
- Improve career development opportunities for researchers and success in an academic environment with consistently high standards;
- Improve success rate for funding proposals (especially in peer-reviewed programs) in a highly competitive environment; and
- Create winning conditions for innovative research—the only means of standing out in an environment where knowledge and publications are growing exponentially.

The action plan approved by the Faculty of Health Sciences to respond to these challenges comprises components such as providing targeted support to increase the success rate for grants awarded to researchers, focusing on niches of excellence and identifying promising emerging research areas as well as enhancing our visibility as well as the dissemination and impact of our research.

Recruitment prospects and scientific direction

FHS academic units recognize the importance of having a clear understanding of their relative positioning in terms of advancing knowledge, contributing to research and its application in the community, and generating new knowledge. As a result, in June 2014, the academic units took part in activities to define research areas in which they must continue and develop in order to increase the impact of the Faculty’s research, better respond to emerging research questions and update and enhance training for future health sciences researchers. The scientific development plan for the Faculty is presented in Appendix 2. The targeted areas are broken down as follows:

Human kinetics – The School operates two complementary poles of research in two main areas:
- Physical activity and health: prevention, delivery mechanisms and targeted interventions
- Sports and society: societal impacts and significance, injury prevention, governance, training and management.

Nursing – Research at the School of Nursing covers a broad spectrum of topics, including critical thinking on health care approaches and training, community-level health interventions, the decision-making process and the patient-family experience in palliative care situations. Possibilities in line with recommendations of the Canadian Nurses Association are intended to focus on community health and geriatrics.
Interdisciplinary studies in health sciences – The School combines expertise in both quantitative and qualitative methodologies within its spheres of activity, which range from biological mechanisms and technology supports to health status and the psychosocial and environmental determinants of health, with a particular focus on reproductive health and aging. The School sees opportunities for differentiation and specialization in gerotechnology, which explores the relationships between technology and support for aging individuals as well the application of various elements of systems biology for healthy, active aging.

Nutrition sciences – The core of our researchers in nutrition sciences are experts in maternal and infant nutrition and their impacts on development throughout lifespan, which is part of a continuum of transrational research that can be roughly summarized as “genes — proteins — metabolites — whole organism — interventions.” In the future, the group may be able to expand its areas of expertise to include individual nutrition with a view to better understanding the determinants of food choices and behaviours, particularly for aging individuals and those suffering from chronic conditions.

Rehabilitation sciences — The work of researchers in audiology, occupational therapy, speech-language pathology and physiotherapy falls within four main areas: a) knowledge transfer, b) cognition and motor skills, c) social participation and d) interaction with the social environment. The School will focus on specific populations, such as aging individuals and those who have suffered a stroke or with social communication difficulties.

GOAL 5: INCREASE RESEARCH INTENSITY WITHIN THE FACULTY
Strategic actions:
12. Create and implement a research office and centralize essential services.
13. Improve the quality of research grant applications to increase success rate.
14. Improve resource management capabilities (encourage researchers/departments to apply for new sources of funding).
15. Create a professional environment that promotes development of knowledge and research skills.

GOAL 6: ESTABLISH STRONG LEADERSHIP IN CUTTING-EDGE RESEARCH AREAS
Strategic actions:
16. Establish the top five areas of research in which the Faculty excels, with the goal of consolidating or strengthening these areas (above and beyond developmental projects).
17. Identify and develop two or three emerging research trends where the Faculty should invest resources in order to become a leader.
18. Lead research networks or centres that round out and harness our full potential in priority areas.
19. Significantly increase the number of research chairs at the Faculty (goal: double).
GOAL 7: INCREASE THE IMPACT OF FACULTY RESEARCH AT THE INTERNATIONAL, NATIONAL, PROVINCIAL AND LOCAL LEVELS

Strategic actions:

20. Greatly increase the presence of Faculty research in spheres of influence within the academic community, health care and health promotion and society.

21. Increase recognition of Faculty research by the University, government (all levels and departments), funding agencies, industry and the general public.

22. Increase the number of international, national and other awards and distinctions held by the Faculty.

Details of strategic actions for year 2014-2015 are presented in section 9.
7. 2014-2018 action plan: Developmental projects

[Universities] forge their reputations through the usefulness of the new knowledge they create, the quality of the graduates they produce and the impact of both upon society.

—University of Ottawa strategic plan, Destination 2020

This statement is at the core of the approach adopted by the Faculty of Health Sciences for implementing developmental projects. These projects reflect the priority the Faculty places on developing major initiatives to address the three strategic themes in the above statement—Research and Innovation, Student Involvement and Engagement and Societal Impact. These initiatives will certainly contribute to raising the Faculty’s profile and reputation.

Three developmental projects have been selected:

- Faculty Multidisciplinary Health Care Clinic and Testing Centre
- Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”
- Centre for Research on “Alimentation, Individuals and Society”

In pooling its forces and establishing partnerships with other faculties at the University, the Faculty aims to create opportunities for collaborative ventures that are profitable and differentiating for all the academic units and for the Faculty. These projects will also have the potential to uncover and bring together new sectors, such as food and food habits, bioenergetics and physical, cultural and social environments as well as new insights on functional autonomy, determinants of healthy aging and approaches that support “aging well.”

The developmental projects are a response to the following challenges:

- Encourage professional training and increase the number of placements;
- Drive innovation by focusing on intersectorality and its contribution to improving health care services and how they are structured and delivered;
- Improve knowledge transfer since there is often a disconnect between research settings, industry and users. There is a direct benefit to rallying these groups around the same project to create much more effective knowledge transfer; and
- Raise the Faculty’s reach through developmental projects that link the institution directly to specific, recognized expertise. These projects will also contribute to the institution’s corporate identity.

As indicated above, the action plan focuses on three projects in three different formats: a health care clinic that offers a real-life training setting, while generating revenue and reinvesting in order to conduct more research related to applying innovative approaches; a research institute that brings together a network of internationally recognized researchers and offers greater training opportunities; and finally a research centre focused on conducting creative research in underdeveloped areas. Details on these projects are in Appendix 3.
GOAL 8: DEFINE AN INNOVATIVE MODEL FOR A FACULTY HEALTH CARE CLINIC THAT IS SUSTAINABLE AND PROFITABLE TO SUPPORT THE FACULTY’S TRAINING AND RESEARCH ACTIVITIES

Strategic actions:

23. Contribute to improving approaches to care, systematic monitoring and management for better health through a collaborative approach encompassing care, training and research.
24. Create and maintain a realistic environment for practical training to ensure rigorous education for all our students and health-care professionals.
25. Provide professional health care services to students and surrounding communities under a revenue-generating model.

Faculty Multidisciplinary Health Care Clinic and Testing Centre (see details in Appendix 3)

The goal of the Faculty’s Multidisciplinary Health Care Clinic and Testing Centre is to become a focal point for research, innovation and training in the field of health care, while remaining aligned with the mandate of a civic-minded university that is in tune with the real needs of the community.

The Clinic would have three components: an interdisciplinary clinic providing care and billable services; research related to testing innovative approaches, equipment and care; clinical training activities closely linked with knowledge transfer.

The Faculty has begun discussions with one of the University’s partner health care managers. Talks to explore different partnership scenarios with local and surrounding agencies, particularly in primarily Francophone communities, and to examine various operating models are progressing well. The result of these preliminary discussions will allow us to fine tune an operational plan and a timeline for proceeding to the next steps.

GOAL 9: CREATE AN INSTITUTE FOR ACADEMIC RESEARCH IN THE AREAS OF “AUTONOMY, FUNCTIONALITY AND LONGEVITY”

Strategic actions:

26. Implement a process for reflecting on research in the area of functional autonomy throughout an individual’s life cycle, on determinants of and approaches that support “aging well,” and on longevity.
27. Guide and support the development of collaborative, interdisciplinary initiatives.
28. Encourage the development of training that integrates autonomy and longevity in the areas of technology, the life sciences and the humanities and social sciences.

Promoting autonomy and optimizing functional adaptation throughout the life cycle (see details in Appendix 3)

The Faculty is currently working on an initiative intended to bring together multidisciplinary, multi-faculty and multi-party expertise to advance knowledge and training on issues related to the individual’s adaptation to a changing physical and social environment throughout the life cycle. The goals of developing an Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity” will be: a) create a process for reflecting on research in the area of functional autonomy of the individual throughout the life cycle, on determinants of “aging well” and approaches that support it and on longevity; b) guide and support the
development of collaborative, interdisciplinary initiatives; c) encourage the development of training that integrates autonomy and longevity in the areas of technology, the life sciences and the humanities and social sciences and d) promote knowledge recognition among decision makers and economic players engaged in this area.

In addition to uniting researchers from the Faculty of Health Sciences, this Institute will be open to any other faculty interested in participating in developing research questions related to functional adaptation throughout the life cycle. Discussions on developing a doctoral program have in fact already begun with the Faculty of Social Sciences.

The Institute will be a gathering place for knowledge and resources for researchers working in this field, and, as an extension of the Faculty’s Multidisciplinary Health Care Clinic and Testing Centre, will provide an expert environment for developing and evaluating new approaches to functional adaptation and personal independence throughout the life cycle.

The Institute for Academic Research will adopt a strategic plan that covers the four pillars—research, training, knowledge transfer and promotion. These areas of touch on issues surrounding adaptation of systems biology; physical and cognitive capacities; functional adaptations in diverse settings; biotechnology and gerotechnology to support the aging individual; adjustments in health care systems, families and informal caregivers; sociopolitical and economic contexts and ethnological and cultural contexts.

Rollout of the action plan for creating the Institute will move more quickly thanks to the approval by Global Alliance of International Longevity Centers, in London in October 2014, of a proposal to create a Canadian international longevity centre in partnership with the Faculty of Health Sciences and host it at the FHS (see details in Appendix 3).

GOAL 10: BUILD A CENTRE FOR RESEARCH ON “ALIMENTATION, INDIVIDUALS AND SOCIETY”

Strategic actions:
29. Create a differentiating and impactful research program on “Alimentation, Individual and Society”.
30. Mobilize members and partners around this promising theme.
31. Recruit and retain the best researchers to work in this area.
32. Support the development and expansion of the research centre through appropriate funding (grants, industry partners, foundations, etc.).

Details of strategic actions for year 2014-2015 are presented in section 9.

Centre for Research on “Alimentation, Individuals and Society” (see details in Appendix 3)

The Faculty has a network of researchers who focus on a variety of food-related issues and topics (such as nutraceuticals and disease prevention; eating, overeating and state of health; lifestyle, food habits and ethnocultural contexts; and food and environmental contexts) that are taught in its schools and programs.

Creating a research group to study alimentation, individuals and society would allow the Faculty to bring researchers together and engage them in this opportunity to advance food-related research within the broader framework of food sustainability. This initiative is in line with the general focus of the Faculty, to conduct high-calibre research in very specific fields, translate research results into concrete applications for members of society and enhance research capacity and expertise through partnerships with industry.
The goals proposed by the Centre for Research on “Alimentation, Individuals and Society” are the following:

• Early identification of and contribution to promising research questions: a) food and health (particularly in the treatment and prevention of chronic inflammatory diseases), b) food and changes over the life cycle (for example, target groups such as seniors) and c) food and socioeconomic and cultural diversity.

• Work with industry members to help them expand their markets by developing foods adapted to specific populations.

• Act as a key advisor to government in developing policies for sustainable food supply while maintaining the health of their populations, supporting cultural diversity and safeguarding the environment.

The next steps include: a) establishing a working group that will bring together new strengths with existing strengths at the Faculty and other areas of the University and its affiliated research centres and institutes; b) organizing a seminar on alimentation, individuals and society to create an opportunity for brainstorming to help identify areas where researchers can have an impact over the short and medium term and c) developing a strategic plan for the research centre.
8. 2014-2018 action plan: Operations and efficiencies

In recent years, the Faculty of Health Sciences has been able to maintain its student numbers and research performance in an increasingly competitive environment where it is more and more difficult to securing funding. Also, with the support of the University, the Faculty is now close to being together under one roof.

As mentioned in the strategic plan Destination 2020, we must continue improving our management practices, and we must aim for prudent and optimal allocation of our resources.

As such, the Faculty must strive to:

- Ensure that quality, focused support is available to support academic activities;
- Optimize work processes and standardize procedures for all administrative and support staff;
- Engage all our members through participative leadership and appropriate distribution of roles and responsibilities;
- Carefully plan use of the new space to make the best use of it and to promote cooperation across academic units; and
- Set performance indicators to measure the overall results of our initiatives and to allow for systematic assessment of results.

The 2014-2018 action plan will focus on three priorities related to managing the Faculty:

- Improve key management processes with the goal of better supporting faculty members in their teaching and research functions.
- Strengthen alignment of organizational structure and goals.
- Plan new space.

GOAL 11: IMPROVE PROCESSES AND THE USE OF TEACHING AND RESEARCH RESOURCES

Strategic actions:

33. Decide on the processes to be improved.
34. Improve services for researchers.
35. Improve efficiency of academic processes and organization of the undergraduate and graduate studies offices.

GOAL 12: PRODUCE AN OPERATIONAL PLAN FOR THE FACULTY TIED TO THE ORGANIZATIONAL STRUCTURE

Strategic actions:

36. Decide on a decision-making process and subsequent steps.
37. Improve efficiency of the Faculty’s organizational structure, taking into account the impact of the new processes and relocation.
38. Develop a communications plan for within and outside the Faculty.
GOAL 13: PRODUCE AN OPERATIONAL PLAN AND BRING THE FACULTY’S MEMBERS TO ONE LOCATION

Strategic actions:

39. Conduct an updated needs analysis related to Faculty space in keeping with Destination 2020.
40. Determine how the space will be used at the new site.
41. Monitor the project as it moves forward.

*Details of strategic actions for year 2014-2015 are presented in section 9.*
9. Actions to carry out in 2014-2015

The action plan covers three years. As a result, specific actions will be rolled out each year. The following table describes the 2014-2015 actions and their success indicators.

The actions for 2015-2016 and 2016-2017 will be set based on these success indicators and the strategic goals the Faculty has established in this plan.

<table>
<thead>
<tr>
<th>STRATEGIC GOAL</th>
<th>STRATEGIC ACTION</th>
<th>2014-2015 ACTIONS</th>
<th>SUCCESS INDICATORS</th>
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<tr>
<td>STRATEGIC FOCUS 1: ACADEMIC PROGRAMS</td>
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<tr>
<td>STRENGTHEN THE QUALITY AND UNIQUENESS OF OUR PROGRAMS</td>
<td>1. Compare the quality and uniqueness of our undergraduate and graduate programs with those of other institutions in Canada</td>
<td>Action 1: Establish an initial committee, QUP1 (Quality — Uniqueness — Program) to strengthen the quality and uniqueness of programs</td>
<td>September 2014: Have obtained the commitment of 5 to 6 people representing each academic unit on the QUP1</td>
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<td>2. Identify the priorities put forth by each academic unit</td>
<td>Action 2: Define the framework at the undergraduate and the graduate levels for evaluating uniqueness and quality</td>
<td>June 2015: For each program (make list), have established quality criteria, unique features and benchmark</td>
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<td>3. Improve and streamline the process for implementing changes</td>
<td>Action 3: Form a subcommittee, QUP2, in each academic unit to support and assist the QUP1 committee (priority to be the 3-5 courses most similar courses)</td>
<td>June 2015: Have identified 3 priority changes for the Faculty</td>
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<td>4. Bridge the gap between the current and desired levels of quality and uniqueness</td>
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<td>OPTIMIZE SYNERGIES ACROSS THE FACULTY’S VARIOUS PROGRAMS</td>
<td>5. Develop shared courses or course components</td>
<td>Action 4: Designate a person (or group) to identify the course elements from each academic unit that could be combined (priority to be the 3-5 most similar courses)</td>
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<td>6. Make the most of the expertise of faculty members and other individuals and increase collaboration among them in program delivery</td>
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<td>7. Integrate interdisciplinarity in teaching and learning activities</td>
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<td>STRATEGIC OBJECTIVE</td>
<td>STRATEGIC ACTIONS</td>
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<td>ENCOURAGE STUDENTS TO CONSIDER GRADUATE STUDIES</td>
<td>8. Put together an accurate picture of students’ paths in each of the programs</td>
<td>Action 5: Hire a consultant to conduct survey on the path toward graduate studies (note: the QUP1 committee could act as steering committee)</td>
<td>December 2014: Results and analyses of the survey available and recommendations discussed with governing committee</td>
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<td>9. Create a profile of the type of graduate student sought</td>
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<td>10. Identify the factors that hinder and encourage consideration of graduate studies</td>
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<td>DEVELOP A TARGETED STRATEGIC ENROLLMENT MANAGEMENT PLAN</td>
<td>11. Present a plan for recruiting targeted groups of students</td>
<td>Action 6: Establish the recruitment action plan</td>
<td>March 2015: Initial elements of the action plan established and in place for the 2015-16 cohort</td>
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<td>STRATEGIC FOCUS 2: RESEARCH</td>
<td>12. Create and implement a research office and centralize essential services</td>
<td>Action 7: Open the Faculty research office</td>
<td>December 2014: In conjunction with strategic focus 4: Initial office structure in place and pool of people (full time and part time) recruited and in launch mode (see the plan established by the committee for this project as a starting point for setting up the office); proceed in a progressive manner</td>
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<td></td>
<td>13. Improve the quality of research grant applications to increase success rate</td>
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<td>April 2015: Initial monitoring and support tools in place: monitoring mechanisms for funding applications, funding management, mentoring program and periodic success indicators for research (they will probably have been established beforehand)</td>
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<td>14. Improve resource management capabilities (encourage researchers/departments to apply for new sources of funding)</td>
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<td>15. Create a professional environment that promotes development of knowledge and research skills</td>
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<td>STRATEGIC OBJECTIVE</td>
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<tr>
<td>ESTABLISH STRONG LEADERSHIP IN CUTTING-EDGE RESEARCH AREAS</td>
<td>16. Establish the top five areas of research in which the Faculty excels, with the goal of consolidating or strengthening these areas (above and beyond developmental projects)</td>
<td><strong>Action 8:</strong> For each academic unit, define 1 or 2 indicators that could be used to position their research activities</td>
<td><strong>December 2014:</strong> Assessment baseline established and in place as well as performance indicators and regular assessment methods</td>
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<td>17. Identify and develop two or three emerging research trends where the Faculty should invest resources in order to become a leader</td>
<td><strong>Action 9:</strong> Have governing committee determine future research directions and promising partnerships and as well as promote future allocation of research chairs</td>
<td><strong>June 2015:</strong> First edition of the scorecard for research performance</td>
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<td>18. Lead research networks or centres that round out and harness our full potential in priority areas</td>
<td></td>
<td><strong>December 2014:</strong> Potential candidates for research chairs identified, recruitment initiated in conjunction with developmental projects that the Faculty will pursue</td>
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<td>19. Significantly increase the number of research chairs at the Faculty (goal: double)</td>
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<td>INCREASE THE IMPACT OF FACULTY RESEARCH AT THE INTERNATIONAL, NATIONAL, PROVINCIAL AND LOCAL LEVELS</td>
<td>20. Greatly increase the presence of Faculty research in spheres of influence within the academic community, health care and health promotion services and society</td>
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<td>21. Increase recognition of Faculty research by the University, government (all levels and departments), funding agencies, industry and the general public</td>
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<td>22. Increase the number of international, national and other awards held by the Faculty</td>
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<td>STRATEGIC OBJECTIVE</td>
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<tr>
<td>STRATEGIC FOCUS 3: DEVELOPMENTAL PROJECTS</td>
<td>Action 10: Form the steering committee with a view to establishing the business plan for a clinic and testing centre conducive to assessing health care approaches (best practices/response protocols/demonstration of health and economic impacts, etc.)</td>
<td>September 2014: Prioritized list of services established</td>
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<td>December 2014: Rollout options documented and under discussion at university level</td>
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<tr>
<td>DEFINE AN INNOVATIVE MODEL FOR A FACULTY MULTIDISCIPLINARY HEALTH CARE CLINIC THAT IS SUSTAINABLE AND PROFITABLE TO SUPPORT THE FACULTY’S TRAINING AND RESEARCH ACTIVITIES</td>
<td>23. Contribute to improving approaches to care, systematic monitoring and management for better health through a collaborative approach encompassing care, training and research</td>
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<td>24. Create and maintain a realistic environment for practical training to ensure rigorous education for all our students and health-care professional</td>
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<td>25. Provide professional health care services to students and surrounding communities under a revenue-generating model</td>
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<td>Action 11: Form the steering committee that will lay the foundations for the Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”</td>
<td>September 2014: Benchmark attained and university presentation document ready</td>
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<td>October 2014: Have identified strategic directions</td>
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<td>CREATE AN INSTITUTE FOR ACADEMIC RESEARCH IN THE AREAS OF “AUTONOMY, FUNCTIONALITY AND LONGEVITY”</td>
<td>26. Implement a process for reflecting on research in the area of functional autonomy throughout an individual’s life cycle, on determinants of and approaches that support “aging well,” and on longevity</td>
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<td>27. Guide and support the development of collaborative, interdisciplinary initiatives</td>
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<td>28. Encourage the development of training that integrates autonomy and longevity in the areas of technology, the life sciences and the humanities and social sciences</td>
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<td>STRATEGIC OBJECTIVE</td>
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<tr>
<td><strong>BUILD A CENTRE FOR RESEARCH ON “ALIMENTATION, INDIVIDUALS AND SOCIETY”</strong></td>
<td>29. Create a differentiating and impactful research program on Alimentation, Individuals and Society</td>
<td><strong>Action 12</strong>: Form the steering committee that will approve initial investments with a view to creating the Centre for Research on “Alimentation, Individuals and Society”</td>
<td><strong>September 2014</strong>: Benchmark attained and university presentation document ready</td>
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<td></td>
<td>30. Mobilize members and partners around this promising theme</td>
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<td><strong>October 2014</strong>: Have identified strategic directions</td>
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<td>31. Recruit and retain the best researchers to work in this area</td>
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<td>32. Support the development and expansion of the research centre through appropriate funding (grants, industry partners, foundations, etc.)</td>
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<td><strong>Action 12</strong>: Form the steering committee that will approve initial investments with a view to creating the Centre for Research on “Alimentation, Individuals and Society”</td>
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<td></td>
<td><strong>September 2014</strong>: Benchmark attained and university presentation document ready</td>
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<td><strong>October 2014</strong>: Have identified strategic directions</td>
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<td><strong>STRATEGIC FOCUS 4: OPERATIONS AND EFFICIENCIES</strong></td>
<td>33. Decode om the processes to be improved</td>
<td><strong>Action 13</strong>: Maintain the process improvement committee and ensure alignment with available tools</td>
<td><strong>September 2014</strong>: Initial tools in place</td>
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<tr>
<td><strong>IMPROVE PROCESSES AND THE USE OF TEACHING AND RESEARCH RESOURCES</strong></td>
<td>34. Improve services for researchers</td>
<td>December 2014: Ranked list of new processes to achieve improvements (other than research and teaching support from basic plan)</td>
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<td>35. Improve efficiency of academic processes and organization of the undergraduate and graduate studies offices</td>
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<td><strong>Action 13</strong>: Maintain the process improvement committee and ensure alignment with available tools</td>
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<td><strong>September 2014</strong>: Initial tools in place</td>
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<td></td>
<td>December 2014: Ranked list of new processes to achieve improvements (other than research and teaching support from basic plan)</td>
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<td><strong>PRODUCE AN OPERATIONAL PLAN FOR THE FACULTY TIED TO THE ORGANIZATIONAL STRUCTURE</strong></td>
<td>36. Decide on a decision making process and subsequent steps</td>
<td><strong>Action 14</strong>: Organize and implement Faculty decision-making process and adjust organizational structure accordingly</td>
<td><strong>September 2014</strong>: Committees have been reconfigured (with their initial mandates) and are in place</td>
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<td>37. Improve efficiency of the Faculty’s organizational structure, taking into account the impact of the new processes and relocation</td>
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<td><strong>March 2015</strong>: Final mandates for committees approved</td>
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<td>38. Develop a communications plan for within and outside the Faculty</td>
<td><strong>Action 15</strong>: Establish Faculty communication procedures</td>
<td><strong>December 2014</strong>: Flowchart of desired procedures for internal and external communication</td>
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<tr>
<td>STRATEGIC OBJECTIVE</td>
<td>STRATEGIC ACTIONS</td>
<td>2014-2015 ACTIONS</td>
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<td>PRODUCE AN OPERATIONAL PLAN AND BRING THE FACULTY’S MEMBERS TO ONE LOCATION</td>
<td>39. Conduct an updated needs analysis related to Faculty space in keeping with Destination 2020&lt;br&gt;40. Determine how the space will be used at the new site&lt;br&gt;41. Monitor the project as it moves forward</td>
<td><strong>Action 16</strong>: Strike and maintain a committee that will guide progress in terms of use of space</td>
<td>September 2014: Committee’s management scorecard established with schedule based on strategies recommended in basic plan</td>
</tr>
</tbody>
</table>
APPENDIX 1: MEMBERS INVOLVED IN THE PLANNING PROCESS
Members involved in the planning process

<table>
<thead>
<tr>
<th>ACADEMIC PROGRAMS</th>
<th>RESEARCH</th>
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<tbody>
<tr>
<td>Pierrette Guimond (chair)</td>
<td>Heidi Sveistrup (chair)</td>
</tr>
<tr>
<td>Marilou Gagnon</td>
<td>Diane Ste Marie</td>
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<tr>
<td>Isabelle Giroux</td>
<td>Barb Davies</td>
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<tr>
<td>Dave Holmes</td>
<td>Jeff Jutai</td>
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<tr>
<td>Pascal Lefebvre</td>
<td>Roanne Thomas</td>
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<tr>
<td>Karen Phillips</td>
<td></td>
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<td>Benoit Séguin</td>
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<td>Ann Sutton</td>
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<tr>
<th>DEVELOPMENTAL PROJECTS</th>
<th>OPERATIONS AND EFFICIENCIES</th>
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<tr>
<td>Hélène Perrault (chair)</td>
<td>Christian Giguère (chair)</td>
</tr>
<tr>
<td>Linda Garcia</td>
<td>France Renaud</td>
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<tr>
<td>Dave Holmes</td>
<td>Diane Ste-Marie</td>
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<tr>
<td>Heidi Sveistrup</td>
<td>Martin Bilodeau</td>
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<td></td>
<td>Dominic Wong-Fortin</td>
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</tbody>
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**Clinic and Testing Center**
- Hélène Perrault
- Dave Holmes
- Claire-Jeanne Dubouloz
- Patrick O’Byrne
- Josée Lagacée
- Eric Doucet

**Institute “Autonomy, Functionality and Longevity”**
- Hélène Perrault
- Linda Garcia
- Martin Bilodeau
- France Rioux
- Christine Mcpherson
- Brad Young/Alexandre Dumas

**Alimentation, Individuals and Society**
- Hélène Perrault
- France Rioux
- Glen Kenny
- François Haman
APPENDIX 2: SCIENTIFIC DEVELOPMENT PLAN FOR THE FACULTY OF HEALTH SCIENCES AND FHS ACADEMIC UNITS
Scientific development plan for the Faculty of Health Sciences and FHS academic units

1. Introduction

The Faculty of Health Sciences stands out in the area of research thanks to some 100 researchers working in various fields, from molecular biology and metabolism to human kinetics and social sciences of health. Research at the Faculty involves many important aspects of health, including women’s health, health in the elderly, health needs of francophones in a minority context, Aboriginal health, physical activity and health, multiple interventions in population health, palliative care, rehabilitation and functional autonomy, health and technology, and evidence-based practice. The Faculty houses several research centres, chairs and units that contribute to its performance:

- Nursing Best Practices Research Centre
- Research Centre for Sport in Canadian Society
- University Research Chair in Forensic Nursing
- Research Chair in Public Health Nursing
- Research Chair in Nursing Care of Children, Youth and Families
- University Research Chair on Knowledge Translation to Patients
- Research Chair in Canadian Francophonie — Health
- Nursing History Research Unit
- Nursing Palliative Care and Education Research Unit (NPCERU)
- SOMET Research Group
- Unit for Critical Research in Health
- Interdisciplinary Research Unit on the Health of Families
- Centre for Innovative Education and Simulation in Nursing

Faculty of Health Sciences researchers are affiliated with a number of local research units, such as the Children’s Hospital of Eastern Ontario Research Institute, the Bruyère Research Institute, the Community Health Research Unit, the Institute for Rehabilitation Research and Development, the University of Ottawa Institute of Mental Health Research, the Montfort Hospital research unit (Institut de recherche de l’Hôpital Montfort), the Institute of Population Health and the Ottawa Health Research Institute.

As mentioned in its action plan, and in close alignment with its scientific development plan, the Faculty of Health Sciences has focused and will continue to focus on innovative, collaborative research centred on the patient and the individual, with the ultimate goal of strengthening its position as a faculty that responds proactively to the rapid, frequent and profound changes that health systems are experiencing (such as increasing innovation, rising costs and interdisciplinary care procedures).

Research is a priority, as indicated by the two working areas put in place to develop the action plan:

- RESEARCH: Establish the strengths of the Faculty (on the basis of a gap analysis with a view to keeping us among the best and increasing our competitiveness) in terms of research topics and training programs, to contribute to raising the profile of the University.
DEVELOPMENTAL PROJECTS: Identify developmental projects that would facilitate bringing the academic units together and would engage them in functioning collaboratively to promote the Faculty’s positioning in niches of excellence.

At the Faculty level, the action plan identifies three target goals that will support its scientific development:

**Goal 5:** to increase research intensity within the Faculty

**Goal 6:** to establish strong leadership in cutting-edge research areas

**Goal 7:** to increase research impact within the Faculty at the international, national, provincial and local levels

The Faculty also intends to undertake three research-intensive developmental projects:

- Faculty Multidisciplinary Health Care Clinic and Testing Centre
- Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”
- Centre for Research on “Alimentation, Individuals and Society”

These three projects will be developed according to three targets, to which all units will contribute:

**Goal 8:** to define an innovative model for a Faculty health care clinic that is sustainable and profitable to support the Faculty’s training and research activities

**Goal 9:** to create an Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”

**Goal 10:** to build a Centre for Research on “Alimentation, Individuals and Society”

The scientific development plan described in the following pages is compatible with the goals set out in the action plan and mentioned above. The plan is broken down by academic unit. By building on already developed research areas, each unit has set itself scientific goals for the short and medium term. It includes, ties to developmental projects and partnerships to put in place in order to meet these goals while creating promising and differentiating opportunities for collaboration. Finally, the results of the plan are described for both the Faculty and the University.
2. Scientific development for the School of Human Kinetics

2.1. Current research areas

The School of Human Kinetics comprises many research and teaching-based laboratories and develops cutting-edge research programs. These programs have access to the resources of the Research Centre for Sport in Canadian Society; the Training Centre for Intervention and Consultation in Sport, Physical Activity, and Health; the Biomechanics Laboratory; the Motor Learning Laboratory and an exercise physiology laboratory.

The School’s research activities can be broken down into four main research domains:

- **Domain 1: Energy metabolism of the whole body**
  The two primary research areas are energy balance and human thermoregulation. A few examples of research directions are the effects of different factors (i.e. nutrition, eating behaviour, environmental pollutants, energy supplements and physical activity) on energy balance and adipose tissue-derived proteins involved in the control of body weight control and insulin sensitivity; thermal and non-thermal factors influencing the control of sweating and skin blood flow and core temperature regulation during and following exercise or work in the heat; modelling efforts that predict human thermoregulatory responses, fatigue and tolerance during heat and cold stress; etc.

- **Domain 2: Intervention-based research**
  This topic brings together several disciplines, such as sociology, psychology and physiology. Researchers are particularly interested in how to guide better lifestyles that improve health and how to encourage the adoption and pursuit of physical activity and dietary habits that have a positive impact on human health. Work is conducted with several populations—young and aging populations, healthy populations and those affected by chronic disease or obesity, populations with disabilities, and studies are carried out in Ontario and the Northwest Territories. Beyond physical activity, the aim is to promote and encourage quality of life, learning and performance as well as the various processes that facilitate reaching these goals.

- **Domain 3: Sport and contribution to the development of Canadian society**
  This topic involves several disciplines, including the social, psychological, spiritual and economic impacts of sport, physical activity and leisure on individuals and societies. For example, major sporting events and festivals are studied in terms of organizational and socioeconomic outlook at both the macro and the individual levels in terms of their impact on identity, gender equality, youth development and commitments to pursuing these initiatives in the long term.

- **Domain 4: Functional analysis of human motion**
  This domain involves the biomechanical and physical basis of human motion and the effects of forces on the human body, as well as neural and psychological foundations for acquiring, learning and controlling human motor skills. Research spans a broad spectrum of fields: prosthetics and better replacement processes; biomechanical equipment to prevent head injuries; sensorimotor control; learning through self-modelling and observation; and posture control and coordination in normal individuals, the elderly and people with medical conditions.
2.2. Academic unit’s goals
The School presents four highly complementary research domains that stand out internationally. The goals are to maintain this position of excellence and increase the critical mass able to contribute to two research axes that encompass the four main research topics described above:

- Intervention-based research: Increase the critical mass in the areas of pathophysiology, exercise, determinants of health and understanding basic mechanisms of human motion in order to remain a major player in these domains
- Sport and impacts on individuals and society: Increase our expertise in the governance process and organization of international events; increase our expertise in the area of long-term development of the individual.

This is essential to maintaining the lead the School has on its competitors and its ability to develop original, cutting-edge projects. The main criterion for expanding teams is excellence.

2.3. Partnerships and collaborations
Our professors have established many partnerships throughout the world to conduct their research, and we will continue to encourage such partnerships to be made and pursued. Within the School, particular effort will be made to better connect with other University departments that initiate or lead projects related to exercise. Each of the School’s four research domains could benefit from such partnerships by gaining access to a “living lab” type of setting. Existing partnerships with other research institutes and other organizations at the individual level will be harnessed to develop and expand the School’s impact on sports, physical activity and leisure policies (i.e. Partnership with Sport Canada), on guidelines for physical activity (i.e. the Heart Institute) and on educational programs related to physical activity and injury prevention (i.e. International Standards Association).

2.4. Contributions and connections to developmental projects
The School of Human Kinetics is a major player in all three developmental projects. Members of the School contribute essential expertise to the Faculty’s Multidisciplinary Health Care Clinic and Testing Centre (Domain 2 mainly, also Domain 4), to the Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity” (domains 1, 2 and 4), and to the Centre for Research on “Alimentation, Individuals and Society” (Domain 1 mainly, also Domain 2). While professors from the School will make a solid contribution to these developmental projects, implementation of these projects will also be an opportunity for the School to strengthen its research domains through access to greater expertise and cutting-edge infrastructures. In other words, the interrelationship with the developmental projects is significant and provides major benefits to the School, the Faculty and the University.
3. Scientific development for the School of Rehabilitation Sciences

3.1. Current research areas
The School is a leader in rehabilitation research, covering the disciplines of audiology, occupational therapy, speech-language pathology and physiotherapy.

Although separate in terms of interventions and professional bodies, together these four disciplines cover the broad field of rehabilitation. The School is the only one in Canada that is part of a health sciences faculty and that guarantees training for professionals in the areas of physical and mental rehabilitation from birth to old age.

Research by the School’s professors falls under four main topics:

- **Domain 1: Knowledge transfer**
  This research topic aims to transform clinical practices by bringing together knowledge, partnerships and actions that promote progress in evidence-based practice. Researchers are in constant contact with clinicians, administrators and decision makers on health policies. Methods of knowledge transfer and implementation of clinical innovation are developed to be applied in accordance with best practices.

- **Domain 2: Cognition and motor skills**
  This topic looks at psychocognitive processes and their relation to motor learning through the life span in terms of studying developmental and pathological dimensions. Diverse populations are studied: healthy elderly individuals, individuals who have suffered a stroke and individuals living with learning difficulties related to the central nervous system (metacognition, language, motor development, balance and posture).

- **Domain 3: Social participation**
  This topic is devoted to studying life situations as they relate to processes of change in the individual from a national and international rehabilitation perspective (community-based rehabilitation). The aim is to analyze involvement and re-involvement in terms of the physical, psychological, psychosocial and spiritual dimensions of the individual in the main activities of daily life. These projects draw on various qualitative and quantitative methodologies, seek to develop adaptation and rehabilitation processes, and propose models for these processes. This field of research is unique in Canada and improves knowledge on social participation and change in individuals or their physical and social environments.

- **Domain 4: Communication**
  This topic includes the fundamental study of neurocommunication and its means of recovery/rehabilitation from communication problems, including deafness, stuttering, aphasia and related challenges and communication with the social environment. This research topic also includes issues of bilingualism, literacy, health care services for francophones in minority language contexts, communication technology and work safety in noisy work environments.
3.2. Academic unit’s goals
The School’s research areas described above are complementary, and the School will strive to maintain and strengthen this complementary nature. To maintain our competitiveness and our unique edge in these domains while promoting cooperation, additional expertise will be brought to the table in the following areas:

- Mental health and social participation at all ages
- Social involvement and learning
- Communication and social integration of the elderly

Although these areas of research to be strengthened apply to the population as whole, the School will focus on specific populations: aging individuals, individuals who have suffered a stroke and, possibly in the future, individuals with autism.

3.3. Partnerships and collaborations
Within the University, the School of Rehabilitation wishes to increase partnerships with the Faculty of Education to strengthen research on re-involvement and learning. Another area of university collaboration is with the Brain and Mind Research Institute, in particular for the themes of cognition and motor skills as well as communication—complementary areas between the two organizations. The School also wishes to increase its international presence. Areas for collaboration have already been identified in Europe (for example, in France, Denmark and Italy), in Israel (Tel Aviv University), in Australia (Curtin University) and in the US.

3.4. Contributions and connections to developmental projects
In keeping with the overall theme of “rehabilitation,” the School will make a solid contribution to the three developmental projects put forward by the Faculty:

- Faculty Multidisciplinary Health Care Clinic and Testing Centre: The School will make a contribution through its extensive expertise on interventions in rehabilitation sciences and re-involvement of the individual in the main activities of daily life following central neurological or orthopedic damage, or issues related to learning, mental health, social situation, etc.
- Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”: The group has unique expertise in research on motor skills and communication in children and the elderly.
- Centre for Research on “Alimentation, Individuals and Society”: Many medical, social and other situations require individuals to change their diet. The group’s expertise on learning for personal change (changes in food habits) will be an asset to the research centre in terms of pushing projects to the cutting-edge in these areas.
4. Scientific development for the School of Nursing

4.1. Current research areas
The School of Nursing at the University of Ottawa is a vibrant research environment. Over the past five years, research productivity at the School has increased rapidly (as reflected in the number of publications and amount of funding). The School is organized around several research units:

- **Community health**
  This unit focuses on strengthening approaches to community health while developing evidence-based practices.

- **Multiple interventions**
  This unit looks at developing strategies focused on changes in individual behaviour and development of personal and group skills related to health in populations such as families, children, elderly individuals and individuals in the final stage of life.

- **The decision-making process and knowledge transfer**
  This unit focuses on designing service models for offering decision making support to populations and, at the local level, evaluating the revenue-generating potential of these models; on providing support for implementing these tools; and on exploring better methods for helping patients make “difficult” decisions related to health care.

- **The history of nursing**
  This research is unique in Canada. It is dedicated to studying the history of health in the broad sense, with an emphasis on the history of nursing.

- **Critical research in health**
  The School aims for an inclusive approach to critical health research and does not restrict its scope to a particular discipline. It promotes diversity in fields of research, creativity in methodological approaches and the use of critical theories to analyze health-related phenomena.

- **Palliative care**
  Research on this topic focuses on the patient and family experience, pain and symptom management, nursing education and practice and interprofessional education and practice in palliative care.

- **Forensic nursing**
  Research is conducted in the overlapping areas of nursing, law and criminology. Research also includes challenges related to terrorism and nursing care in disaster situations.

- **Nursing for minority populations**
  Research touches on the field of mental health and cross-institutional experiences of francophones. Research also includes other significant areas of health.

- **Evidence and best practices**
  Work revolves around research and development of the best possible nursing practices as they affect many groups in the population (families, children, elderly individuals, individuals at the end of life, etc.).

These research fields apply to several categories of the population in terms of health: children, families, vulnerable populations, the elderly, women, etc.

Evidently, the fields of research at the School of Nursing cover many domains. In all cases, they touch on discipline-specific and professional aspects of nursing. This balance is essential to producing research that is creative and innovative, and that transforms practice. By allowing the intersection of different categories of
research (philosophy, ethics, socioeconomics, the sociocultural dimension, knowledge transfer, changes in practice, etc.), the School enables them to “feed off one another” and to approach issues and decisions from different, more creative perspectives, based on multifaceted knowledge acquisition at the epistemological, theoretical and methodological levels.

### 4.2. Academic unit’s goals

Research at the School is based on strong premises such as exploring many paradigms and various epistemologies founded on diverse methodologies. Another important component that allows the School to produce unique research is maintaining balance and ongoing dialogue between research on discipline-specific matters (more abstract) and research on professional matters (more concrete, involving practice). The School of Nursing would like to continue work in this direction. In terms of specific goals, the School wishes to put greater emphasis on partnerships to harness the full potential of the diversity of research it supports:

- Increase “cross-fertilization” among the Centre, research chairs and research units within the School;
- Maintain research diversity and encourage debate at all levels within the School and externally;
- Maintain patient- and community-centred research (evaluative research, patient benefits, modification of practices, etc.);
- Intensify research on simulation procedures;
- Improve alignment with the activities of the Nursing Best Practice Research Centre (NBPRC); and
- Increase clinical research (ties with partners and communities) and evaluative research.

### 4.3. Partnerships and collaborations

The NBPRC is a partnership between the University of Ottawa and the Registered Nurses’ Association of Ontario. The Centre strives to have a positive impact on practice and outcomes for the patient/client, health care providers and the organization of care and services. The Centre promotes the generation and uptake of practices based on the best available evidence to health care professionals, policymakers, and students in all roles and sectors. The School of Nursing firmly wishes to increase its level of collaboration and cooperation with the Centre.

The School is already well established in its community, with strong ties to many community organizations. These partnerships will absolutely continue.

### 4.4. Contributions and connections to developmental projects

The research projects underway at the School of Nursing align perfectly with two of the three developmental projects sponsored by the Faculty: the Faculty Multidisciplinary Health Care Clinic and Testing Centre, and the Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”.

In pursuing its mission, the School of Nursing makes a significant contribution to quality nursing through teaching and research excellence, and through knowledge advancement in the field of individual and group well-being. Through its leadership role in the development and practice of nursing care, and its participation in nursing and interdisciplinary decision making, the School is a key player in the development of the health clinic. In the same vein, the Clinic’s mission, which will include a mandate to facilitate evaluation of practical interventions, is of clear benefit to the School, providing it with a cutting-edge practical and research setting in which to conduct its activities.
With respect to the Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”, researchers from the School will certainly contribute to developing several topics, in particular care and intervention practices throughout the life cycle. The School’s ability to navigate between discipline-specific and professional matters will undoubtedly be of benefit to the Institute by highlighting the factors (such as ethics and environmental, sociocultural, economic and physiological factors) that need to be considered with respect to functional adaptation through the life cycle.
5. Scientific development for the Interdisciplinary School of Health Sciences

5.1. Current research areas
The School defines research concentration to mean that there are at least two researchers who are presently publishing and holding peer reviewed grant funding in the area. The current areas of research concentration in the School are the following:

- Aging
- Technology and Health
- Biopsychosocial Determinants of Disease and Health
- Reproductive Health

5.2. Academic unit’s goals
The objectives of the School are to fill currently vacant tenure-track positions and recruit new professors to build interdisciplinary research capacity in areas that have strategic importance both to the School and the Faculty of Health Sciences because they will:

- Be unique within Canada;
- Make significant contributions to the Faculty’s proposed new Center projects (Interprofessional Clinic; Aging and Longevity);
- Create the critical mass needed to attract significant grant funding and support PhD programs.
- Leverage our current research strengths; and
- Attract funding and commercial translation from non-traditional partners in industry and donor communities.

The areas that we have targeted for growth and development are:

1. Gerotechnology (defined as the design and use of technologies that both promote independence and autonomy in old age and strengthen the support networks of older people)

   We want the School to be at the forefront of research on the relationship between aging (and aging-in-place) and technologies. Subthemes include advanced theoretical analysis (recognizing the complex biopsychosocial phenomena that affect this relationships among technology users, caregivers, and the contexts in which technologies are used), longitudinal methods for technology outcomes research (for investigating technologies as forms of complex health care interventions), and research and development of technologies which promote healthy aging.

   We want to recruit professors from areas that include biomedical and rehabilitation engineering, computing and information sciences, psychology (human factors, cognitive science), and social gerontology.

2. Applying interdisciplinary approaches to develop applications of systems biology (defined as a biology-based interdisciplinary field of study that focuses on complex interactions within biological systems, using a holistic approach (instead of the more traditional biomedical reductionism) to health promotion research).

   We want the School to be at the forefront of research on the applications of systems biology to healthy aging across the lifespan. In particular, we want to improve understanding of all important links among factors operating in early or mid-life that may produce consequences decades later. Methods may include combined analyses of longitudinal data from different life stages (e.g., childhood to young adult, young adult to middle
age, and middle age to old and very old ages). Subthemes include variability among and within individuals in rates of change with age in biologic, pathologic, behavioral, social and functional characteristics; synergistic effects of pharmacologic and non-pharmacologic interventions on multiple chronic conditions associated with aging; how factors that affect aging in other species influence biological systems in human aging.

We want to recruit professors from areas that include biogerontology, neuroscience, psychopharmacology, systems biology and comparative psychology.

5.3. Partnerships and collaborations
Because of its interdisciplinary nature, the school can and should rely on diverse collaborations to meet its objectives. Among the major contributors have been identified:

- Inside the University of Ottawa
  - Faculty of Medicine (Epidemiology and Community Health)
  - Faculty of Social Sciences
  - Faculty of Engineering
- Council on Aging of Ottawa
- Bruyère Research Institute
- Canadian Agency for Drugs and Technologies in Health
- Canadian Association of functional accessories
- Technology Association support and rehabilitation of North America

5.4. Contributions and connections to developmental projects
Members of the School will play a key role in structuring projects developed by the Faculty in helping to build world-class facilities for the evaluation of interventions to promote healthy aging as well as for research and training interprofessional in assistive technologies.
6. Scientific development for the Nutrition Sciences program

6.1. Current research areas

The four current professors in the program are actively involved in research. They form a small research group whose activities converge toward one main goal: impacts of maternal and infant nutrition on development throughout life.

Together, the group has a strong profile in translational research spanning a continuum that could be summarized as “genes — proteins — cells — animal models — patient — development of care,” with the following subprojects:

- Program aimed at better understanding the differences between individuals in response to food and the effect of nutrients on gene expression at various stages of life (from pregnancy to adulthood); approaches in genetic and nutritional epidemiology to identifying nutritional, genetic and environmental factors acting individually or in synergy in the prevention of chronic diseases such as cardiovascular disease, obesity and type 2 diabetes;
- Program aimed at better understanding the effect of bioactive peptides, more precisely the effect of peptides and probiotics, on tumor and mucosal activity; studies on immunomodulatory substances in vivo, with a focus on immunological surveillance against tumors and infections;
- Program aimed at better understanding the impacts of maternal iron deficiency on the development of the child’s central nervous system; and
- Program aimed at preventing and treating obesity, prediabetes and diabetes (in children and adults, including women who are pregnant and nursing) through a health approach that combines healthy eating and physical activity.

6.2. Academic unit’s goals

As with personalized medicine, work developed by the professors from the Nutrition Sciences program demonstrates that it is unlikely that a single special diet would be suitable for all individuals suffering from a given medical condition.

Also, the goal of the program is to strengthen expertise in personalized nutrition by directing efforts toward the aging population and those with chronic diseases. The aim is to explore the possibility of designing diets that are specifically adapted to the characteristics (physical, genetic, sociodemographic, etc.) of the older individual, taking into account this clientele’s multiple drug-nutrient interactions, diminished ability to swallow, hydration, many food intolerances and cultural background. All these factors have a direct effect on food choices and behaviours. This type of approach can be developed at various levels:

- Personalized dietary analysis of the elderly individual and recommendations for improving food choices;
- Use of phenotype data in addition to dietary data to refine the personalized analysis mentioned above; and
- Use of genotype data in addition to phenotype data.

Since the group operates along a certain continuum of translational research (gene — protein — metabolites — humans — interventions), it can absolutely contribute to innovative developments in Nutrition Sciences.
6.3. Partnerships and collaborations
The group is already strongly involved in interdisciplinary collaboration to expand the health care knowledge base by incorporating knowledge on nutrition. The group is recognized by organizations such as Health Canada and participates in the development of nutrition-related intervention guidelines, aiming for optimal development of the individual throughout the life cycle. While these partnerships should be maintained, the group also wishes to build more bridges with networks and groups that manage population cohorts, such as Genome Québec Innovation Centre, Nutrigenomix and CARTaGENE.

6.4. Contributions and connections to developmental projects
The overall research goal pursued by the Nutrition Sciences program to better characterize and personalize nutritional interventions for the aging individual—is perfectly aligned with the developmental projects for the Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity”, and the Centre for Research on “Alimentation, Individuals and Society”. The group will certainly make a contribution, through its expertise, to cutting-edge research on the relation between food, the development of the individual and the individual’s adaption to change through the life cycle. In the same vein, the group will be able to take advantage of expertise that is complementary to its own through the developmental projects and will therefore be better equipped to remain at the leading-edge of its niche of excellence.
APPENDIX 3: STRUCTURAL PROJECTS
1. Faculty Multidisciplinary Health Care Clinic and Testing Centre

1. Introduction

Healthcare needs have become as complex as they are varied. Most healthcare systems try to respond to this complexity by assembling multidisciplinary teams of healthcare professionals who can work together to provide complementary treatments and services.

This approach is supported by Health Canada and offers a number of benefits:

- Improved quality of care and better outcomes;
- Improved access to health care;
- Improved recruitment and retention of health professionals;
- Improved communication among health professionals;
- Improved use of health human resources; and
- Greater satisfaction among patients and health professionals.

The effectiveness and quality of care can be improved through the use of multidisciplinary teams. As such, this approach should be incorporated into treatment delivery models and when creating the teams of professionals. This type of approach would ensure greater communication between care providers, more active collaboration among team members and more integrated care, all of which, when combined, provides greater benefits for the patient than each of the elements individually.

In addition to the use of a multidisciplinary approach, the ability to evaluate innovative technologies and treatments is another important aspect that must be incorporated into the healthcare system. By doing so, we would be providing an important element for decision makers in order to determine whether innovative approaches are integrated into the delivery of healthcare services. However, such evaluations come with their own set of challenges, such as coming to an accepted definition of “value” and setting the evaluation criteria. Finding evidence is certainly one of the greatest challenges. Access to a living lab that would provide opportunities for progress experimentation offers a clear advantage for all those involved—patients, healthcare professionals, decision makers, and industry— to find evidence and assist with the decision-making process.

This context provides an excellent opportunity to create a setting for evaluating new and innovative technologies and practices and a centre where research and treatment will help transform the idea of multidisciplinarity into concrete changes in practices.
2. Description of the Faculty’s Multidisciplinary Health Care Clinic and Testing Centre

“L’intégration (liée à l’interdisciplinarité) repose sur un nouveau cadre de référence concernant une pratique particulière, une intervention à mener, un résultat à obtenir ou une production à faire. Ce cadre de référence commun a été articulé par une équipe diversifiée et transcende les préoccupations de chaque discipline et les territoires professionnels tout en respectant les champs exclusifs de responsabilité.”
Archambault et al.¹

The Faculty of Health Sciences is well positioned to play a key role in advancing the concept of multidisciplinarity in the development and delivery of healthcare services and in creating an environment that is conducive to progress experimentation. It brings together more than 100 researchers working in a variety of disciplines, from molecular biology and human kinetics to nutrition and social sciences of health. In fact, one of the Faculty’s academic units, the Interdisciplinary School of Health Sciences, is devoted entirely to this concept and focuses on training professionals who are committed to multidisciplinarity.

The Faculty was also the impetus behind the creation of the interprofessional clinic with a training setting where interprofessional care delivery is at the core of the learning experience of students in both the health and social sciences, while at the same time providing francophones living in a minority language context with primary care in parallel with existing health services.

As mentioned, the Faculty has the opportunity to promote a clinical model for a centre that will evaluate new treatments and services and that emphasizes collaboration between team members of multiples disciplines.

This new centre must:

- Ensure that the clinic operations are profitable
- Meet the clinical needs of students (practical and professional experience)
- Act as a research facilitator due to its access to patients, and its ability to observe, practices and healthcare pathways
- Integrate itself into the community / city by the development of a new neighbourhood and the capacity to be "adopted" on both sides

Within such a context, the Faculty’s multidisciplinary healthcare clinic and testing centre will focus on three main aspects:

3. Vision and mandate

Vision

To become a profitable university model that brings together research, innovation and training in one location in order to develop state-of-the-art approaches to the delivery of healthcare services in an urban setting, thus contributing to the mission of a civic-minded university.

Mandate

- **Operate as a private clinic with the objective of being profitable**
- **Deliver multidisciplinary healthcare services in an urban setting and provide a complete range of health services, developed based on an in-depth understanding of the determinants of health, to students and members of the community**
- **Become a partner of choice to allow researchers at the Faculty of Health Sciences and their partners to successfully conduct research that leads to innovative approaches to healthcare**
- **Make it possible for students, on their own or within a clinical setting, to acquire professional skills, including research experience, by providing a clinical setting with the highest professional standards and supporting cutting-edge research**
4. Objectives of the Faculty’s Multidisciplinary Health Care Clinic and Testing Centre

**Multidisciplinary clinic**

Develop and implement a business model that will ensure the clinic is profitable by offering cutting-edge and innovative services.

Provide professional health services to students and community members.

Offer professional training services and continuing education activities for healthcare teams at local facilities.

Together with members of the public health sector, suggest innovative approaches for the use of public health services.

Explore the possibility of NP-led clinics.

Explore the possibility of partnerships with local businesses (imaging services, optometry, sports facilities, etc.)

Encourage patients to become involved in managing their health. Develop concrete actions for patients to help them become more active partners in their care.

**Testing centre – Creating research opportunities**

- Build the infrastructure needed for a “living lab” and develop the expertise required to conduct leading-edge research on health determinants, individual health and wellness (illness) experiences and creating resulting treatments and healthcare services.

- Contribute to improving healthcare approaches, better regular follow-up, increased responsibility for health by connecting healthcare services, training and research.

**Connections**

- Create and maintain a natural setting for practical training in order to ensure all students receive top-quality training.

- Increase the number and quality of (interdisciplinary) placements in order to better train future professionals in the health sciences.

- Link placements and training through the use of simulation so training is more closely connected to practical experience.
5. Next steps

Obtain support of the University to move forward with the Clinic project

The proposed multidisciplinary healthcare clinic and testing centre encompasses the three elements seen to be at the core of universities—education, research and community engagement. It is also an initiative that will ultimately bring together numerous faculties, partners and decision-making bodies, such as public health agencies. This project must be fully supported by the University.

Establish a working group

With the support of the University’s administration, establish a working group to create the multidisciplinary healthcare clinic and testing centre. Eventually, individuals from other faculties and various University services could become involved, in addition to representatives within different clinical settings at partner institutions and public health agencies.

Develop a business plan for the clinic and a strategic plan for the testing centre

Clinic activities will revolve around patient care. It must provide a full range of services and be profitable. The business plan will provide details on services to be offered, the target clientele, relationships to be developed with government decision makers, etc.

The strategic plan for the testing centre will define the research priorities related to multidisciplinary treatments and services, methodologies to be put into place in order to evaluate innovative approaches to healthcare, etc.

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2 http://www.aucc.ca/media-room/news-and-commentary/speech-by-stephen-toope-aucc-centennial-membership-meeting/
2. Institute for Academic Research in the areas of “Autonomy, functionality and longevity”

1. Introduction

According to the UN, the rapid growth of the world population is a recent phenomenon in the history of the world. The world’s population of persons over the age of 60 is growing at a rate of 2% per year, far more quickly than the rate for the general population. Over the next 25 years, it will likely continue to grow more quickly than any other age group. The annual growth rate of population aged 60 years or over could reach 2.8% in the five-year period from 2025 to 2030.

However, while most countries and their governments would like to implement policies to foster health and active aging, these same policies will often focus on the major challenges that increased longevity creates for the social and medical systems and, more widely, for other social and economic stakeholders. In fact, an aging population also means a gradual increase in the prevalence of the leading causes of morbidity and mortality, heart disease, strokes, chronic lung diseases, etc. In addition to an increase in chronic diseases and comorbidities, we will see an increase in the number of individuals with disabilities. Currently, more than 46% of persons aged 60 years or over are disabled in some form, with the number higher in women than in men. The majority of disabilities involve visual impairments, dementia, hearing loss and osteoarthritis.

“Healthy living” has become a common slogan in all segments of society, yet most efforts and investments—whether in care or services, research, private sector—focus on elderly persons with diminished independence.

Of course aging is a physical process that cannot be reversed. However, rather than a simple outcome, it can certainly become an opportunity to be developed for society—long before individuals lose their independence. This is the approach taken by CIHR’s Institute on Aging in its 2013-2018 strategic plan. This plan focuses on strategic research priorities under the theme of Living Longer, Living Better:

- The life course as a determinant of active and satisfying aging
- Adding life to the late years
- Interventions appropriate to the complexity of older people’s state of health
- Health care and services that combine and integrate continuity, innovation and efficiency
- Ensuring the conditions for a positive impact on older people’s health and wellness

With CIHR’s research priorities and the expertise developed at the University of Ottawa, the study of functional adaptations over a person’s lifespan is certainly a promising area that would see longevity as a driving force for economic and social development.

The Institute for Academic Research in the areas of “Autonomy, Functionality and Longevity” will focus on knowledge creation on determinants of healthy, active and satisfying aging, one of the areas of focus of CIHR’s Institute of Aging.
2. Autonomy, functionality and longevity: Research parameters and pillars – Institute for Academic Research

“L’état de santé d’une population se mesure non seulement par la prévalence des problèmes de santé, mais aussi par la capacité des individus d’exercer pleinement et de façon autonome leurs rôles sociaux et leurs activités quotidiennes.”

Russel Wilkins

Research parameters

As mentioned in the introduction, while a great deal of research focuses on persons with decreasing independence (physical or cognitive), very few multidisciplinary teams focus on physical and cognitive functioning and the ability of individuals to adapt over their lifetime in order to maintain their independence. The overall goal of the Institute is to redefine functional independence (physical or cognitive) within the context of longevity, viewing it rather as a dynamic process that changes based on the different situations over the course of one’s life. It involves a paradigm shift, one where the surroundings, attitudes, etc.—i.e., their overall environment—change to match the person and not the other way around.

The Faculty of Health Sciences is well positioned to play a key leadership role in this area at the University of Ottawa. Such an approach would naturally complement the objectives of the Brain and Mind Research Institute, whose goal is to gain a deeper understanding of the causes of impairments in cognitive ability and, ultimately, to promote brain health and prevent disease.

Some of the potential research topics at the new Institute:

- Health: rehabilitation, assistive devices
- Social Sciences: the economic aspect of treatment and services; workplace (ergonomics; culture)
- Functional accommodations in the workplace
- Functional and cognitive adaptations
- How cells adapt and aging
- Adapting the environment and aging
- Adapting healthcare systems to changes due to aging
- Coping behaviours within the family unit and among caregivers
- Adapting to one’s physical, psychological and sensory changes during the aging process

http://classiques.uqac.ca/contemporains/quebec_sante_quebec/rapport_enquete_92_93_t1/t1_chap_14_autonomie_fonctionnelle/sante_qc_Autonomie_fonction.pdf
Research pillars

The Institute for Academic Research will bring together researchers with varied backgrounds to work collaboratively towards the common goal of redefining functional independence (physical and cognitive) as it relates to life expectancy.

The Institute will differ from a traditional research centre in that in addition to its focus on research, it will have a strong focus on training (for-credit training programs), encourage innovation (partnerships with industry) and facilitate knowledge transfer (partnerships with practical settings).

- **Research**
  - The Institute will bring together researchers both from the Faculty of Health Sciences and other faculties, including the faculties of Social Sciences and Medicine, for example. Any other faculty interested in areas of research related to functional adaptations over a person’s life.
  - The Institute will serve as a repository for knowledge and resources for researchers.

- **Training**
  - The Institute will be involved in developing training material.
  - The Institute will offer a series of seminars, which will be included in certain training programs.
  - The Institute will host visiting professors.
  - The Institute will help internationalize training programs.

- **Knowledge transfer**
  - The Institute will ensure a genuine and practical ongoing process for knowledge transfer (developing knowledge into tangible solutions for an aging population).
  - Links will be made within the community (partnerships to be explored with, for example, Montfort, Bruyère, la clinique Santé de la FSSanté); simulation labs, etc., will be used to bring knowledge from discovery to application.

- **Promotion**
  - The Institute will promote research as a value-added measure for businesses, offering resources (through partnerships), to develop and test innovative products and services to respond to an aging population.

The Institute for Academic Research will develop a strategic plan and address each of the above pillars. The strategic plan will also aim to equip the Institute with the means to allow its members to truly work collaboratively, over and above providing a physical location.

3. Vision and mandate

**Vision**

To become a model for developing and applying knowledge related to functional independence and longevity by changing research paradigms and by providing opportunities for multidisciplinary training.
The Institute should function under a research model unique in Canada, through both the proposed research topics and its approach to research. There are a number of specific elements required in order for the Institute to realize its vision:

1. A multidisciplinary approach centred on developmental analysis of functional independence
   - As noted above, the Institute will not focus on the loss of independence due to aging but rather on adapting the environment to the person during the different life stages as the person ages. An approach focused on functional adaptation is more integrated and multifaceted, requiring expertise in the health sciences, technology, the social sciences (anthropology, for example) and even economics.

2. Create a genuine and practical continuum for knowledge transfer, as described in the section on the Institute’s research pillars, above.

3. Facilities with leading-edge technologies
   - Facilities should make it possible to communicate with other centres very quickly through the use of leading-edge technologies (Web-based and other technologies).
   - Institute governance and the scientific leadership will promote collaboration with other centres and encourage thinking outside the box. Fundamental elements will include think tanks, support programs managed by a multidisciplinary scientific committee, matrix management, common spaces and student involvement (clinical rotations, co-direction, etc.).

Mandate

- **Organize thinking on research around functional independence and longevity**
- **Assist and support the development of collaborative and interdisciplinary projects**
- **Stimulate the emergence of a training incorporating autonomy and longevity in the areas of technology, life sciences and social sciences**
- **Promote the use of knowledge to policy makers and economic agents involved in this issue**

This mandate will be reflected in the following four types of research:

- Basic research
- Clinical research
- Epidemiological research
- Research related to the development of commercial products

4. Objectives of the Institute for Academic Research

1. Be an important actor in changing research paradigms related to aging to focus on the process of functional adaptations over a person’s lifespan.
2. Be leaders in informing decision makers in practice settings and government decision-making bodies on important connections between the aging person, functional adaptation and the environment.


4. Anticipate and offer suitable training, with high added value on the market, to meet the broad range of needs due to increased longevity.

5. Next steps

**Create a task force**

Together with the research and academic vice-deans, create a task for to develop a governance model and a strategic plan for the Institute for Academic Research and to recruit researchers. Eventually, the Institute would bring together researchers from numerous faculties.

**Establish an action plan to create the Institute for Academic Research**

The ultimate goal is to integrate research on autonomy, functionality and longevity already being conducted by Faculty researchers along with their partners in a coherent fashion. An action plan must therefore involve consultations with major partners in order to attract researchers in fields of interest to the faculty who could then lead the research program and coordinate development activities.

Over the past few months, the Faculty has held discussions with the leaders of an initiative to create an international longevity centre in Canada (there can be only one in each country and it must be connected to a university) within the network of International Longevity Centers Global Alliance (ILC Global Alliance), a partner of the International Association of Gerontology and Geriatrics. The University of Ottawa’s Faculty of Health Sciences submitted a proposal for a longevity centre to the board of the ILC Global Alliance for Canada in October 2014. If approved, this could lead to the creation of ILC-Canada at the Faculty in the winter of 2015. Having the Canadian centre of ILC Global Alliance at the Faculty together with the access to an extensive network of researchers around the world will provide an excellent springboard for rolling out our action plan.

**Announce creation of the Institute for Academic Research**

In its strategic plan, the University of Ottawa committed to identifying promising priority areas to help position itself as a member of major international research networks around the world. Announcement of the creation of the Institute for Academic Research— with its research efforts focused on autonomy, functionality and longevity— will allow the University to achieve this goal and take its place among the top research sites in the world.
3. Centre for Research on “Alimentation, Individuals and Society”

1. Introduction

The food situation in Canada and other developed countries, with access to adequate food supplies and successful agri-food industries, appears to be a positive one. However, the true picture is far from positive. We continue to gain greater knowledge on the links between nutrition and health. According to Christian Rémésy, nutritionist and a former research director at INRA Clermon-Ferrand, living long and in good health is not necessarily a good thing. He believes that the prevalence of diabetes, heart disease, cancers and other degenerative diseases remains far too high and that—even worse—the food industry has played a leading role in creating the epidemic of obesity.

Even if we continue to increase our level of knowledge and the recommendations of public health agencies related to nutrition are more closely followed, wide socio-economic disparities still remain—a factor that should be taken into consideration when developing an effective approach to nutrition.

It is important to also keep in mind that food does not serve only to meet our nutritional needs—it holds a strong connection to cultural identity and plays an important social role. For example, today, people are becoming more aware of not only the impact the food they consume has on their health but also the impact of their choices on the environment. Terms such as food security and food insecurity, which are not the same as food safety, are used to describe problems related to adequate access to healthy foods. This access is related to factors such as social and economic vulnerability—something that is poorly integrated, if at all, into the global chain of food production, distribution and consumption. Elements related to traceability and the quality of food (i.e., food safety) have become important considerations when developing new products and food-related policies. The notion of quality includes quality not only in terms of health effects (a safe food product) but also the nutritional properties (ability of the food product to provide proper nutrition) and organoleptic properties (food that appeals to our tastes).

This context represents an opportunity to develop a research network focused on healthy food (which would include socio-cultural determinants), how it is affected in different environments (workplace, extreme weather conditions, adequate physical activity, living in the community or in an institutional setting) as well as factors connected to life circumstances (food insecurity, chronic illness, interactions, food allergies, drug interactions) and how policies and programs, etc., that promote and support appropriate eating behaviours throughout the life cycle are likely to be affected. This research would place food research back within the food-individuals-society continuum and be done within the broader framework of food sustainability.

2. Description of the Centre for Research on “Alimentation, Individuals and Society”

“L’alimentation durable: une alimentation saine et équilibrée qui répond aux besoins nutritionnels et organoleptiques des consommateurs tout en préservant l’environnement et la diversité culturelle.”

Pôle de compétitivité Vitagora, France
The Faculty of Health Sciences is uniquely positioned to advance nutrition research within the broader vision of food sustainability. The Faculty’s network of researchers work on a variety of food-related projects:

- **From the perspective of individuals:**
  - Functional foods (nutraceuticals) and cancer prevention; supplements and prevention of chronic disease
  - Maternal nutrition and its effects on the newborn and in the early years
  - Genetic, nutritional and environmental factors that work individually or collectively to prevent chronic diseases such as heart disease, obesity and type 2 diabetes
  - The impact on and interaction with factors of health or chronic disease:
    - Molecular genetics – the impact of salt consumption and through studying how genetics is related to salt-dependent hypertension
    - Impact of food habits on metabolism
    - Effect of food habits such as overeating and poor food choices on the incidence of obesity, treating obesity and metabolic disorders
    - Connection between food choices and physical activity

- **From a sociological perspective:**
  - Study of lifestyles including food habits of diverse cultural groups, particularly aboriginals
  - Social mechanisms that explain health practices, particularly those leading to obesity in certain social groups

- **From the perspective of the physical environment:**
  - Impact of dehydration on physical and cognitive abilities—environmental stress—energy metabolism as well as hypo- and hyperthermia in a variety of environments—such as hot and cold.

Creating a research group to study “Alimentation, Individuals and Society” would allow the Faculty to bring together researchers and facilitate exchanges among individuals working in the field. Its areas of focus, which have the potential to attract commercial partners such as Groupe Cordon Bleu, will be

1) **Preserving health equity – Connection between food and state of health**
   - Interactions of food and drugs
   - Food allergies and intolerances

2) **Developing enjoyment of food and adapting foods to various cultural, social or life situations**
   - Dietary habits and sweet/salty foods
   - Consequences on long-term health

3) **Foods and various cultural and social groups**
   - Vulnerable individuals and those experiencing poverty, health problems
   - Mobility issues, accommodation
   - Interaction of eating habits/food enjoyment and living environment

More specific topics such as testing for malnutrition; obesity, eating habits and tastes; nutrition and social factors; perinatal stress—metabolic behaviour and risks in adults; food interactions (including dehydration) and climatic conditions can be explored at the Centre.
3. Goals of the Centre for Research on “Alimentation, Individuals and Society”

The goals are proposed goals at this time. However, they give an indication of the direction the Faculty is aiming for: conduct high-calibre research in very specific fields, translate research results into concrete applications for society and enhance research capacity and expertise through partnerships with industry:

- To ensure early identification of and contribution to promising research questions:
  - Food and health (particularly in the treatment and prevention of chronic inflammatory disease);
  - Food and changes over the life cycle (for example, target groups such as seniors)
  - Food and socioeconomic and cultural difference
- To work with industry members to help them expand their markets by developing foods adapted to specific populations
- To act as a key advisor to government in developing policies for sustainable food supply while maintaining the health of their populations, cultural diversity and the environment.

4. Next steps

**Establish a working group**

Establish a working group within the Faculty to create a research network on “Alimentation, Individual and Society”. The group will address bringing together news strengths with existing strengths at the Faculty at other areas of the University and its affiliated research centres and institutes. It will also shape the research framework alongside the creation of the nutrition program.

**Organize a one-day seminar – Alimentation, Individuals and Society**

This event will help position the Faculty of Health Science, specifically, and the University of Ottawa, more generally, on the theme of “Alimentation, Individual and Society” as well create an opportunity for brainstorming to help identify research areas where researchers can have an impact over the short and medium term. Finally, this seminar would provide an opportunity to identify potential candidates that could join the new centre.

**Develop a strategic plan for research development at the Centre on the theme of Alimentation, Individuals and Society**

The plan will address research priorities for the continuum of topics laid out as well as the resources necessary to develop the research, whether these resources include research platforms or human resources. It will also identify partnerships to be created, with both other research centres and government decision makers, in order to conduct cutting-edge research and ensure an effective transfer of knowledge.