

## University of Calgary – Qatar Strategic Research Plan 2013 - 2017

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إثراءً للصحة والعافية في قطر

### Background

With the vision to enrich health and wellness in Qatar and the Gulf region, the University of Calgary-Qatar (UCQ) is at the forefront of health promotion and disease prevention. While educating future nurses of Qatar, we will engage individuals, families, communities, and key stake holders in education and research activities designed to enhance individuals, family, and community capacity to attain, maintain, and improve health.

With the aim of building Qatar's knowledge-based society, the Qatar National Research Strategy (QNRS) 2012's vision that "Qatar will be an international centre for research and development excellent and innovation." The University of Calgary-Qatar nursing students, graduates, and faculty have been actively engaged in research training and activities that contribute to not only QNRS's vision but also to the health and wellness of the people of Qatar.

In 2011, the University of Calgary main campus underwent a major breakthrough when members at the university collectively agreed to a visionary goal of becoming one of the top five research universities in Canada by 2016. The *Eyes High* vision also identifies several goals: "The University of Calgary will be a global intellectual hub....", "Students will thrive in programs made rich by research and hands-on experience..." Closely connected to the University of Calgary main campus, UCQ faculty and students' research activities and innovation will make significant contribution to the *Eyes High* vision and goals.

### **UCQ Research Department**

### **Vision Statement**

UCQ Research Department will be the faculty and students center for research excellent and innovation.

#### **Mission Statement**

To achieve our vision and contribute to the development and achievement of both Qatar National Research Strategy 2012 (QNRS 2012) and University of Calgary's vision we will:

- foster research culture, build, and increase capacity for research
- inspire and support faculty and students in developing and advancing their research potential for discovery of new knowledge
- transfer new knowledge into tangible and applied products and services
- disseminate new knowledge for the benefit of the society and for improving the health and social well-being of Qatar's population.

### **Core Commitments:**

To achieve UCQ vision and mission and to contribute to the U of C's Eyes High vision, we will:

- support and align UCQ research initiatives to Qatar's research priorities that address health and wellness, and educational needs in Qatar
- develop and foster UCQ capacities for research

- actively seek potential funding opportunities
- provide research opportunities for faculty and students, tailored to their strengths, expertise, and needs
- collaborate and support international research initiates
- collaborate and support Faculty of Nursing faculty research initiatives in Qatar
- collaborate and support inter-professional/interdisciplinary research initiatives in Qatar
- facilitate and emphasize the dissemination and knowledge translation of research findings

### Assessment of UCQ Research Environment

### History

The University of Calgary-Qatar's program of research was established in January of 2010. Submission of proposals for funding to the Qatar National Research Fund (QNRF), Undergraduate Research Experience Program (UREP) and the National Priority Research Program (NPRP) has been quite successful. To date, the total amount of funding received from QNRF is \$2,866,317.00 USD. In addition to these funding awards, UCQ's excellent research outcomes have helped the institution gain recognition from academics and researchers as one of the most respected research intensive institutions in Qatar. With the recent establishment and implementation of our course-based and thesis-based Graduate Programs, UCQ research training and activities among faculty and students will increase substantially.

### UCQ's Strength and Opportunities

- 1. There are four areas that represent UCQ research strengths: Strongly encouraging and supporting interprofessional/ interdisciplinary research and learning activities, UCQ has several identified research strengths:
  - 1.1: Health promotion and disease prevention
  - 1.2: Chronic illness

1.3: Interdisciplinary/inter-professional development model for transnational teaching, learning, and research.

1.4: Education of students with different ethno-cultural backgrounds

- 2. There are several major research initiatives that fall under these areas of research, that align with QNRS goals, and could represent signature initiatives for UCQ/ differentiate UCQ on the world stage
  - Inter-professional education and practice (*QNRS Enterprise-Wide Pillar- Goal EW.5.1*)
  - Pedagogy model(s) for education of international students (*QNRS Enterprise-Wide Pillar-Goal EW.4*)
  - Strengthen K-12 and undergraduate programs in Nursing Education (*QNRS Enterprise-Wide Pillar- Goal EW.4.2*)
  - Environmental impact of air pollution on respiratory health (*QNRS Energy and Environmental Pillar- Goal EE.5.2 and QNRS Health Pillar Goal HE. 1.12*)

- Oncology, cancer prevention (*QNRS Health Pillar Goal HE.1.2*)
- Maternal/child health promotion, disease and injury prevention (*QNRS Health Pillar Goal HE.1.4 and Goal HE.1.5*)
- Mental health (QNRS Health Pillar Goal HE.1.9)
- Promotion of healthy lifestyle/ quality of life practices/evidence-based health care (*QNRS Health Pillar Goal HE.1.11 and Goal HE.2.2*)

## 3. There are many collaborations/partnerships in Qatar that could promote world-class research areas identified above.

- 1. Hamad Medical Corporation: Nursing and medicine (e.g., Cardiovascular Department, National Center for Cancer Care and Research, Psychiatry Department, etc.) are very supportive. Researchers at UCQ have already conducted research projects with nurses and physicians as collaborators/key investigators. With the establishment of Hamad Nursing Research Committee, we foresee additional collaboration in nursing research between Hamad Medical Corporation and UCQ.
- 2. Qatar Primary Health Care Department: Several of our Faculty members work very closely with Qatar Primary Health Care in community settings and in research projects.
- 3. Qatar Public Health Department: Support and collaboration have been established. The Qatar Director of Public Health department had expressed his interest in the work of UCQ and support for public health research to improve population health and quality of life.
- 4. We have a state of the art simulation centre with highly qualified and experienced staff in the field. These faculty members have been working collaboratively and developing partnerships with simulation staff at Hamad Medical Corporation and SIDRA, which will be a very prominent health care institution in Qatar when it is opened in 2014.
- 5. Weill-Cornell Medical College, Qatar University, College of the North Atlantic-Qatar: Collaboration and partnership have been established in an inter-professional research initiative. We foresee more collaborative initiatives happening in the near future.
- 6. Qatar National Research Foundation (QNRF): A major research funding agency in Qatar. All UCQ research studies are currently funded by the QNRF.
- 7. The University of Calgary campus, Faculty of Nursing and Faculty of Medicine, Community Health Sciences Department have researchers with expertise to work with and support our research.
- 8. Purdue University Center for Cancer Research, International Breast Cancer and Nutrition global networks.
- 9. Asia- Australia Mental Health (AAMH), in partnership with the Supreme Council of Health, has already accessed UCQ support and expertise in the development of Qatar's National Mental Health Care and Research initiative.
- 10. The Qatar Environment and Energy Research Institute (**QEERI**). QEERI is the member of Qatar Foundation for Education, Science and Community Development (QF). Its goals are to conduct and coordinate long-term and multidisciplinary research that addresses critical national priorities concerning energy and the environment, by

integrating knowledge of the energy, environment, food and water resources in ways appropriate for Qatar and the region.

### **UCQ Research Strategic Plan**

This research strategic plan aligns with the QNRS 2012 and University of Calgary-Qatar's four priorities stated in the UCQ's strategic plan 2012-2015, while building on identified needs, strengths and opportunities specifically for the Research Department. The four priorities for UCQ's research strategic plan are:

- 1. Expand research programs strategically
- 2. Strengthen collaborative relationships and increase beneficial research outcomes
- 3. Deliver a quality research learning and training experience to students
- 4. Continue to improve organizational capability and support for research

### **Strategic Priority 1: Expand Research Programs Strategically**

- 1.1. Continue to increase the number of funded research projects Masters and Ph.D prepared instructors in Qatar have a great opportunity to apply for Undergraduate Research Experience Program (UREP) funding. UREP projects with 12 months duration can produce research outcomes in a very reasonable timeline. PhD-prepared faculty will be encouraged to initiate and submit National Priority Research Program (NPRP) proposals that fit their experience and expertise. All researchers and potential researchers at UCQ will be advised of Qatar National Research Strategy 2012 to ensure research projects/portfolios are aligned with Qatar's vision for research and development (*QNRS 12 Enterprise-Wide Pillar Goal EW.1.1*), to enrich Qatar's health and wellness. Furthermore, to connect researchers in Qatar to their peers and colleagues both in Qatar and abroad, to attract and inform scientists from abroad about research and opportunities in Qatar, UCQ should access QNRF Conferences and Workshop Sponsorship Programs (CWSP). This will help to build human capital and foster research capacity in Qatar. A competitive-based internal research funding program, the UCQ Startup Research Grants, will support/bridge researchers with future QNRF NPRP projects.
- 1.2. **Build a research culture at UCQ and graduate studies intensiveness** –Aligning with *QNRS* 2012 Enterprise-Wide Pillar Goal EW.4.3: "enhance and create new graduate programs in areas of national interest," supporting graduate programs is essential to developing a research culture and capacity. UCQ's research within Graduate Studies programs will build on the availability of faculty with PhD and their research expertise. Graduate students enrolled in the thesis-based programs and their supervisors will be encouraged to apply for Graduate Student Research Award (GSRA) from QNRF.

- **1.3. Recruitment and retention of faculty members with a PhD** With increasing graduate student enrollment and new graduate thesis-based programs, UCQ will need to recruit and retain faculty with PhD and research experience. Recruitment of faculty at the professoriate rank, who have the greatest potential to catalyze research activity within the Faculty and Qatar, need to be strategically based on UCQ major research initiatives that fall under four identified areas of research. Such studies could represent signature initiatives for UCQ and differentiate UCQ on the world stage. Other areas relevant to Qatar that need researchers with expertise are: obesity, diabetes, cardiovascular diseases, and mental health.
- **1.4. Plan for long-term development of research capacity and space requirements** As UCQ research activities and graduate programs continue to grow, the need for professoriate faculty with strong research track records, and new space to accommodate research programs will need to be considered. Current faculty members must also be supported to compete more consistently and successfully for research grants and awards.

### **Strategic Priority 2: Strengthen collaborative relationship and increase research outcomes**

- 2.1. Continue to nurture and expand strong relationships with other institutions and stakeholders in Qatar It is imperative that UCQ continues to nurture relationship with QNRF, maintains and builds strong relationships to support and develop research programs that are interdisciplinary and cross institutional relevant to Qatar. This strategy will support *QNRS 2012 Enterprise-Wide Pillar Goal EW.5.1*: "Develop and strengthen interdisciplinary and multidisciplinary research partnerships between the academic, private and public components of the research enterprise both within Qatar and internationally"
- 2.2. Build strong relationships and collaborative research initiatives with the University of Calgary The University of Calgary provides UCQ's Canadian academic support. It is essential that all relevant departments and faculties at UCQ and University of Calgary, especially the Faculty of Nursing, maintain ongoing relationships and support each other in research agenda to achieve *Eyes High* vision. UCQ will support the U of C Faculty of Nursing's recently launched "*Qatar Research Development Initiative*" grants. It is anticipated that research projects and activities will be increased substantially with UCQ as the submitting institution for University of Calgary main campus (two NPRP projects per year). Thus, there will be much stronger research collaboration and capacity building between two campuses.
- 2.3. Increase UCQ's research outcomes UCQ researchers must actively disseminate their research findings to increase their research outcomes. All researchers should be supported and encouraged to disseminate their research results. All lead researchers should be encouraged to set a goal to publish or submit at least two manuscripts per year for peer reviewed publications, and to present research results at local, regional, and international conferences. Researchers work with UCQ Public Affairs Department to disseminate findings and achievements of UCQ researchers internally at UCQ and externally to the Qatar community

### Strategic Priority 3: Deliver quality research learning and training experience

UCQ is dedicated to providing the highest quality of nursing education and research based on Canadian standards. The following strategic goals can help achieve this priority.

- **3.1.** Continue mentoring and enhancing the research experience of students The provision of solid mentoring and support for undergraduate and graduate students in their studies and research is essential to the capacity building and preparation of nurse researchers in Qatar. UCQ will continue to provide students with opportunities to be involved with research projects.
- 3.2 **Develop new and innovative sources of financial support for graduate students to work as research assistants** – This is an additional means of funding for students in the graduate studies programs to get hands-on research experience because they are not eligible to participate in the Undergraduate Research Experience Program (UREP) projects.
- **3.3.** Continue to improve student support for learning Learning the skills necessary to become nurse researchers, especially in a second-language environment, is difficult and requires ongoing and appropriate support. UCQ will continue to foster new and innovative ways for students to learn and to be successful as nurse researchers and as lifelong learners. Appropriate support will continue to improve and grow to the meet the needs of our students.
- **3.4.** Continuously improve research training and enhance research skills for faculty researchers – Workshops and seminars regarding research methodology, writing proposal, management of research project, dissemination of research findings, and writing for publication will be implemented at UCQ. For a program to remain current and maintain its excellence, constant evaluation and feedback will be sought from faculty and studentsto guide development of training initiatives.
- **3.5.** Continue to enhance faculty and student learning through effective support and resources -All faculty and students will have access to support services and resources that enhance their research experience. This will help address the training needs of faculty and learning needs of students with respect to research skills and activities.

# Strategic Priority 4: Continue to improve UCQ Research Office organizational capability and support for faculty and students

UCQ has been conducting research since 2010. Within three years, UCQ became one of the research intensive universities in Qatar with a Research Office operating since August 2012. The UCQ Research Office (RO) has a close working relationship with the Qatar National Research Fund (QNRF). Although situated in Qatar, the RO will also have a close working relationship with the University of Calgary's

Research Services Department. Because the research department at UCQ is a new entity, the RO will work on adapting policies and procedures from the U of C main campus for UCQ. Finding ways to provide for effective and efficient services/support for the faculty, researchers, and students should be an important priority. Having motivated, committed and competent staff at all levels is critical to the UCQ research office function. This strategic priority is aligned with *QNRS 2012 Enterprise –Wide Pillar Goal EW.1.2 and EW.3*. Our strategy for continuing to improve research office organizational capability and effectiveness focuses on the following goals.

- **4.1. Improve UCQ research office organizational performance** UCQ research office is currently in the start-up phase. Although we have informally followed research policies and procedures established from the main campus, by the very nature of a startup, the processes were often not adequately defined. We now need to focus on the following: 1) understanding, identifying, establishing, and stabilizing our policies and procedures related to all UCQ research activities, and processes for implementation of these policies and procedures for research; 2) clarifying roles and responsibilities; and 3) improving communication and understanding, improving effectiveness and efficiency of services and support for faculty, researchers, and students. Support from U of C main campus and UCQ's financial, human resources, public affairs departments for researchers and research department will be strengthened.
- **4.2. Assess institution risks and implement appropriate mitigation strategies** As UCQ grows, it will become increasingly important to continue to identify and mitigate risks (both internal and external) associated with UCQ's operations and research activities. As our research projects and activities increase, research ethics protocol and principles need to be strictly observed and followed to protect research participants (our own students, patients, and community at large).
- 4.3 Inform faculty and researchers of ONRF guidelines and improve our record keeping of research projects – Our researchers and faculty are coming from Canada and many do not have extensive research experience. Thus QNRF's policies and procedures need to be emphasized with all researchers. Accurate record keeping of all research activities are needed and must be updated regularly by research staff and the UCQ financial department. There is a need to assign UCQ Finance department specialists to develop and maintain software and reporting for QNRF-related financial and progress reports-Although research support staff maintain financial records of ONRF-funded studies, UCO-ONRF policies and procedures were established from the main campus. By the very nature of a startup, the processes were often not adequately defined. We now need to focus immediate UCO needs that are specific to ONRF reporting such as: 1) understanding and supporting UCQ research activities and processes related to financial procedures and reports for research; 2) clarifying roles and responsibilities; and 3) improving communication and understanding, improving effectiveness and efficiency of services and support for faculty, researchers, and students. Support from U of C main campus and UCQ's financial, human resources, public affairs departments for researchers and research department should also be

strengthened for future QNRF funded studies based in UCQ. This will help UCQ to meet *QNRS* 2012 Enterprise –Wide Pillar Goal EW.1.2; EW.3.1; EW.3.2.

### Research

RESEARCH					
Goals	Action Item	Deliverables	Responsible Individual(s)	Target Delivery Date	
Strategic Priority 1: E	xpand Research Programs Strategically				
1.1 Increase number of funded research	To have more faculty submit proposals for external funding to QNRF				
projects	1. <b>UREP Program</b> – Notify and encourage faculty and students regarding UREP opportunity and eligibility. Emphasize that faculty with Master degrees can lead UREP research projects; assess faculty and students' needs	1. UREP proposal will be submitted every cycle (2 cycles per year)	1. All faculty; Dean; Associate Dean Research (ADR) & Research office (RO); Faculty Development Centre	2013 Ongoing	
	2. <b>NPRP Program</b> – Notify and encourage faculty with PhDs of NPRP opportunities and eligibility. Emphasize career path, amount of funding, salary to buy out teaching release for research intensive researchers; assess faculty needs.	2. NPRP proposal will be submitted every cycle (one cycle per year)	<ol> <li>All faculty; Dean; ADR &amp; RO; Faculty Development Centre</li> </ol>	2013 Ongoing	
	3. <b>Conferences and Workshop Sponsorship Program</b> (CWSP) - Coordinate and apply for this program each year as required. An annual UCQ Research Symposium can be established with the support of this program from QNRF.	3. At the request of the Faculty	3. All faculty; Dean; ADR; RO; PR department	2013 Annually	
	4. Graduate Student Research Award (GSRA) - This program provides financial support for Master students (up to 2 years) and PhD students (up to 4 years).	<ol> <li>Graduate thesis-based program approved and intake of first students (yearly report)</li> </ol>	4. Dean; Associate Deans; Director of Student Services; HR; Graduate Program Committee.	2013 -2014	
	To have faculty submit proposals for internal funding to UCQ				
	U of C seed grants and travel grants – notify and encourage faculty and instructors to apply for these internal funding from the U of C main campus.	5. Faculty successful at applying for these grants (yearly report)	5. Faculty	2013	

	<b>UCQ Startup research grants</b> - This internal competitive funding program will support/bridge Faculty researchers who plan to apply for funding with QNRF in the future.	5. Faculty successful at applying for these grants (yearly report)	Faculty	2013
	To explore and access U of C main campus support - Establish peer review of proposals process - Explore with main campus regarding resource and support with proposal development and peer review process for UCQ researchers.	Internal peer review process in place UCQ researchers have access to U of C main campus internal review.	Dean; ADR; UCQ Research Office; U of C research services	2013
1.2 Build research culture and graduate studies intensiveness	Assist the Dean office, Student Services, and HR to build graduate programs, recruit faculty and graduate students who demonstrate potential and aptitude for research. Recruitment of PhD prepared faculty at the professoriate rank, who have the research expertise and track record in the following areas: 1.1: Health promotion and disease prevention 1.2: Chronic illness 1.3: Interdisciplinary/inter-professional development 1.4: Education of students with different ethno-cultural backgrounds	<ul> <li>Hire PhD faculty with research track record</li> <li>Graduate thesis-based program approved and intake of first students</li> </ul>	Dean; Associate Deans; Director of Student Services; Human Resources.	2013

RESEARCH				
Goals	Action Item	Deliverables	Responsible Individual(s)	Target Delivery Date
Strategic Priority 2: St	rengthen collaborative relationship and increase res	earch outcomes		
2.1 Continue to nurture and expand strong relationships with other institutions and stakeholders in Qatar	<ul> <li>Build collaborative relationships with healthcare and academic institutions in Qatar and worldwide through shared research and education opportunities.</li> <li>Continue to nurture relationship with QNRF</li> </ul>	Monthly and yearly report	Faculty; ADR; Faculty Development Centre	2013 Ongoing
2.2 Build strong relationships and collaborative research with U of C main campus	Maintain ongoing relationships, support, assist all relevant U of C departments and faculties to develop research initiative and innovation in Qatar; support and collaborate with Faculty of Nursing main campus's "Qatar research Development Initiative" grant which will lead to NPRP grants applications.	Monthly and yearly report	Faculty; ADR; Faculty Development Centre; UCQ research Committee	2013 Ongoing
2.3 Increase UCQ research outcomes	<ul> <li>Support and assist UCQ researchers to disseminate their research findings; collaborate with QScience team for publishing and editorial opportunities; writing workshop.</li> <li>Work with Public Affairs Department to disseminate findings and achievements of UCQ researchers internally at UCQ and externally to the Qatar community</li> <li>Work on process of incorporating publications of peer reviewed articles as contributions toward Annual Performance Review; set goal of at least one peer review publication and one presentation at international conferences for each faculty member per year; actively seek and notify all faculty and staff of national and regional conferences.</li> </ul>	Monthly and yearly report	Faculty; ADR; Faculty Development Centre; UCQ research Committee; Public Affairs Department Dean & CEO; the Dean Office; ADA	2013 Ongoing

Strategic Priority 3: Deliver quality research learning and training experience				
3.1 Continue mentoring and enhancing research experience of students	<ul> <li>To provide students with opportunities to engage in research activities.</li> <li>1. UREP Program for undergraduate students</li> <li>2. Research assistant for graduate students</li> <li>3. Provide resources, support, and career counseling to students</li> </ul>	<ol> <li>Yearly report; Program Evaluation report with recommendations</li> <li>Proposal regarding plan to address recommendations</li> </ol>	Faculty; ADR; UCQ research Committee Undergraduate Program Committee Graduate Program Committee	2013 Ongoing
3.4 Continuously improve research training and enhancing research skills for faculty researchers and students	Develop and deliver workshops and seminars, and host guess speaker series to improve skills for writing proposal, research design, management of research project, dissemination of research results. Feedback from faculty and students will be sought to meet the needs of researchers and to guide development of training initiatives".	Yearly report Plan to address recommendations	Dean and Associate Deans; Research Office; Faculty Development Centre.	2013 Ongoing
3.5 Continue to enhance faculty and student learning through effective support and resources	To develop supervisors support and mentoring mechanisms/process to enhance graduate students' learning and training experience.	Yearly report Plan to address recommendations	Dean and Associate Deans; Graduate Program Committee	2013

#### Strategic Priority 4: Continue to improve UCQ Research Office organizational capability and support for faculty and students Action Item **Deliverables** Responsible Goals Target **Delivery Date** Individual(s) - Understanding, identifying, establishing, and Monthly and yearly report 1/5/2013 4.1 Improve UCQ ADR and Dean; UCQ research office and Plan to address recommendations research office ; RO, stabilizing our policies and procedures related to all ongoing other departments HR, Financial, PR UCQ research activities, and processes for organizational implementation of these policies and procedures for performance research. - Clarifying roles and responsibilities of research office staff. - Improving communication and understanding, improving effectiveness and efficiency services and support for faculty, researchers, and students. 2013 4.2 Assess institutional Monthly and yearly report ADR and Dean; UCQ - Research ethics protocol and principles will be strictly risks and implement Plan to address recommendations research office ; RO; Ongoing observed and followed to protect research participants appropriate mitigation **Faculty Development** (our own students, patients, and community at large). strategies Centre - Faculty and students will attend ethics workshop organized by Qatar Supreme Council of Health and CITI program (a requirement by Hamad Medical Corporation) 4.3 Inform faculty and - All research team members will be informed of Monthly and yearly report ADR; UCQ research 2013 researchers of QNRF QNRF's policies and procedures and adherence to these Plan to address recommendations office; RO; Ongoing guidelines and improve policies and procedures will be emphasized with faculty/researchers; U of our record keeping on everyone involved with research. C and UCQ financial research projects department staff. -Record keeping of all research activities will be kept accurately and updated regularly by the principal investigators and research staff. - Working closely with the financial department to ensure the efficiency and accuracy of all financial activities and records.