

Nursing Health Services Research Unit

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# Preparing Tomorrow's Leaders Today: Investing in Capacity Building for Nursing Health Services Research

Evaluation of the Undergraduate Student Research  
Internship Program at McMaster University



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# Acknowledgements

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## Executive Summary

Building and supporting research capacity in health sciences is vital to inform decision making in policy and practice and provide optimal care. For the past 20 years, the Ontario Ministry of Health and Long-Term Care has funded a provincial nursing health services research unit (NHSRU) that provides essential data on the nursing workforce.

The NHSRU is a collaborative partnership between McMaster University and the University of Toronto and is supported by a network of multidisciplinary researchers and service organizations. The NHSRU is a centre for excellence in systematic evaluation. The sites serve as repositories for existing research and are resources for government bodies, nurses, researchers and professional organizations nationally and internationally.

The Undergraduate Student Research Internship Program (USRIP) offered by the NHSRU at McMaster University was designed to enhance capacity in health services by targeting undergraduates interested in research. This unique program prepares tomorrow's health leaders today by helping them develop and hone their research skills through education, participation and the application of new knowledge.

This report provides an evaluation of the USRIP and demonstrates how the program achieves its intended outcomes and how government investment contributes to health research capacity. Document analysis was used, which included financial records, publications and a review of annual reports dating back to the inception of the NHSRU. In addition, the McMaster University Research Internship Program Survey was sent to former student research interns. Quantitative and qualitative analysis of survey responses was conducted. Information obtained from all sources was plotted on a logic framework (Cooke, 2005; Cooke & Sarre, 2009).

Findings indicated that the USRIP

- Develops research skills and confidence
- Contributes to sustainability of learned skills
- Supports evidence-based practice
- Influences career decisions

Based on the survey responses, the USRIP is a valuable and cost-effective approach to building research capacity. The investment made by the Ontario government, along with funds from other sources and organizations, has produced significant outcomes that support capacity building and innovation in research.

## Introduction

Building capacity in research requires the ability to conduct research, use results effectively and promote demand for research (Bates et al., 2006). It is important to build and support research capacity in health sciences in order to inform decision making in policy and practice and provide optimal care.

Governments are committed to creating the best possible conditions and providing the best possible services for their citizens. Healthcare is one of the major areas of government concern. In Ontario, the Ministry of Health and Long-Term Care (MOHLTC) focuses on sustaining and protecting the public health-care system and improving the health status of individuals and families (Council of Academic Hospitals of Ontario, 2011). To this end, it engages in capacity-building activities and collaborates with subject experts, who conduct evidence-based research and provide critical information on topics relevant to the provision of high quality healthcare.

The MOHLTC has funded a nursing health services research unit (NHSRU) in Ontario whose mandate has remained consistent on how to best build and sustain the nursing workforce for better patient outcomes. This multi-site program also supports collaboration between researchers and decision makers and ensuring accurate and timely data are available to inform evidence-based decision making. The research done by the NHSRU is primarily focused on improving the body of knowledge that will allow decision making around the quality, effectiveness, equity and utilization of health care and health services in Ontario through research and with focus on nursing service. The NHSRU is a collaborative partnership between McMaster University and the University of Toronto. In addition to the MOHLTC, it is supported by a network of multidisciplinary researchers and service organi-

zations that represent a broad range of disciplines across the province. This investment has created a centre for excellence in systematic evaluation. The sites serve as repositories for existing research and are resources for government bodies, nurses, researchers and professional organizations nationally and internationally.

An important feature of the NHSRU is the commitment of its researchers to build capacity by providing opportunities for new researchers and students to work alongside them on existing projects. The Undergraduate Student Research Internship Program (USRIP) at McMaster University was designed to enhance capacity in health services by targeting undergraduates interested in research. This unique program is intended to help future healthcare providers develop and hone their research skills through education, participation and the application of new knowledge.

This report provides an evaluation of the internship program offered through the NHSRU at McMaster University. It demonstrates how government investment contributes to health research capacity and includes the following sections:

- History of the program at McMaster University
- Rationale for nursing health services research capacity building
- Framework utilized to evaluate the program
- Results of the evaluation
- Outcomes of an invitational educational event held to highlight the importance of the program
- Recommendations regarding the implementation of internship programs across organizations

# History of the Undergraduate Student Research Internship Program at McMaster University

Since its inception, the USRIP has recruited 45 students (two to four students every year) from the Undergraduate BScN Program and other disciplines. It provides students with an opportunity to learn the core competencies of research, as well as its importance in the creation and evaluation of healthcare policy, planning and service delivery. By leveraging the funds received from the government of Ontario, the NHSRU has obtained further investments from local, provincial and national agencies. These include McMaster University's MacWork Pro-

gram, Canadian Institutes of Health Research (CIHR), Canadian Health Services Research Foundation (CHSRF), Canadian International Development Agency (CIDA), Social Sciences and Humanities Research Council of Canada (SSHRC), Ontario Critical Care Secretariat, Ontario Hospital Association (OHA) and College of Nurses of Ontario (CNO). The investments enable the NHSRU to employ undergraduate students to work with staff and learn valuable research skills.



# Rationale for Nursing Health Services Research Capacity Building

The Ontario Ministry of Research and Innovation (2010, p. 2) believes that “innovation is key to creating a strong economy and rewarding jobs that families can depend on today and in the future.” One form of innovation is developing a system for an effective workforce. To help ensure an effective healthcare system and the delivery of high-quality services, researchers at the NHSRU conduct studies and provide pertinent information for policy and decision makers.

The provincial government has committed to investing in capacity-building activities that empower, identify and encourage growth and diversification. This includes producing innovative thinkers capable of flourishing in an increasingly global society (Ontario Ministry of Research and Innovation, 2010). The USRIP prepares tomorrow’s healthcare leaders today and equips them with the necessary skills to identify and address existing and emergent issues.

Another important aspect of building research capacity is the ability to translate knowledge into practical application. The CIHR is the main funding agency nationwide for health research; turning research into evidence is part of its mandate to improve the health of Canadians (CIHR, 2009; McMaster University, 2011). Research can be used to enhance practice and support policy decisions in the healthcare sector, and relevant findings can be disseminated to stakeholders, healthcare workers and the public through knowledge translation.

An effective healthcare system that supports the health and well-being of its citizens is determined by research-informed practice, management and policy decisions (MOHLTC, 2011). The MOHLTC aims to promote evidence-based

health practice to create a clinically competent and innovative workforce (MOHLTC, 2011). In a constantly changing healthcare system, it is crucial that services to the public and decisions about these services are informed by evidence.

Building research capacity allows nurses to deliver research-oriented practice that provides appropriate care to their patients (Bishop & Freshwater, 2003). Although it is not the responsibility of all qualified nurses to undertake research, it is critical for nurses to be able to understand the basic process of research and interpret research findings (Bishop & Freshwater, 2003). The literature suggests that along with increasing the overall standard of care, developing a culture of research within the healthcare environment will extend the level of professional knowledge, credibility and accountability of nurses (Bishop & Freshwater, 2003).

Internship programs are one way to facilitate capacity building in research. Individuals who complete internship programs during their undergraduate studies are more likely to pursue higher education (Hunter, Laursen, & Seymour, 2007). This in turn creates job opportunities; increases clinical competency; enhances the ability to appraise, utilize and undertake research; improves professional status and credibility with professional colleagues; and facilitates leadership roles (Whyte, Lugton, & Fawcett, 2000).

In order to produce innovative and competent researchers, educators and clinical practitioners, it is essential to develop programs that target undergraduate students. Recent research and evaluation studies have recognized the benefits of undergraduate research programs for students, faculty and institutions. Hunter

et al. (2007) conducted a study of a summer undergraduate research program developed for four liberal arts colleges in the United States. They found that students demonstrated the following skills and attributes: critical thinking and problem solving, ability to analyze and interpret results, understanding research problems and designs, confidence in conducting research and improved communication and interpersonal skills. Students also had increased opportunities to collaborate and network with faculty, peers and researchers and had clearer goals for graduate studies and future careers.

Hynie, Jensen, Johnny, Wedlock and Phipps (2011) reported the results of graduate student internships funded by York University's Knowledge Mobilization Unit. These internships enabled students to become involved in research with community agencies that focused on global issues. The internships supported students to develop research and professional skills and a new understanding of theoretical knowledge. Many of these students were able to establish ongoing relationships with their community partners, which created future opportunities.

Jamerson, Fish and Frandsen (2009) reviewed the Nursing Student Research Assistant Program, which is offered at St. Louis Children's Hospital, Montana, in collaboration with local nursing schools. Undergraduate, graduate and doctoral students in the program participate in a number of research studies. Students indicated they gained knowledge of research processes, including the development, collection and dissemination of nursing research. They also recognized the importance of research in improving healthcare and hospital operations. The evidence demonstrates the effectiveness of internship programs in developing the research competencies required for an innovative and experienced workforce. However, there is a lack of literature regarding the importance of building research capacity specifically at the undergraduate level.

Another area for consideration is the need for research capacity building in the nursing workforce. It is essential that nurses have the skills necessary to contribute to the future of healthcare in Ontario as the focus shifts to a more prominent evidence-based practice and the development of emerging health leaders (EHLs). This is becoming one of the foremost challenges for Canada's healthcare system (Hunt, Gruenwoldt, & Lyster, 2011).

Emerging health leaders value lifelong learning, have strategic vision and innovative ideas, possess strong communication skills, pursue graduate education, are involved in professional development activities and are willing to accept increased responsibility and risk. Identifying and mentoring EHLs helps create qualified professionals who can improve the healthcare system (Hunt et al., 2011). The MOHLTC's ongoing investment in the NHSRU supports the education and advancement of EHLs who recognize the importance of nursing research.

# Framework for Evaluation of the Undergraduate Student Research Internship Program

A program evaluation was conducted to demonstrate how the USRIP achieves its intended outcomes, specifically developing nursing research capacity. Document analysis was used, which included financial records, publications and a review of annual reports for the past 20 years since the inception of the NHSRU. The Capacity Building for the Nursing Health Services Research Unit: A Program Evaluation of the McMaster University Research Internship Program Survey was also used. This online survey was sent to former student research interns, who were identified in the document analysis phase. Information obtained from these resources was plotted on a logic framework:

Inputs → Activities → Outputs → Outcomes

The **inputs** contributed to program **activities**, which in turn produced anticipated **outputs**. The program **outcomes** resulted in a shift towards achieving program goals and objectives (Frechting, 2007). In order to illustrate the outcomes, participants' responses to the survey were initially coded into nine categories:

1. Academic skills
  - Writing, communication, presentation and organization
2. Evidence-based practice
3. Recognizing the importance and impact of research in healthcare
4. Collaboration and networking
5. Research dissemination and knowledge translation
6. Career and educational decision making
7. Better understanding of research process and tools
  - Literature searches; data entry, synthesis and retrieval; critical appraisal of literature; utilizing software; research designs

and methodology; participating in research groups

8. Leadership opportunities
9. Supportive work environment

The framework developed by Cooke (2005) identifies similar categories and encompasses six principles of capacity building: (1) skills and confidence building; (2) developing research close to practice; (3) linkages and collaborations; (4) appropriate dissemination; (5) continuity and sustainability; and (6) infrastructure. These principles assess an individual's skills and ability to perform useful research leading to evidence-based practice. A later study by Cooke and Sarre (2009) identified three additional principles of capacity building in research: (1) research activity, (2) research culture and (3) leadership. The outcomes categories were adapted to include these nine principles.

Data for the outcomes was obtained from the survey, which was developed and published using LimeSurvey®, an open source, user-friendly web application. Data was collected and stored on McMaster University's server. Forty-five student interns were identified and contact information was obtained for 36. The survey was sent electronically to the e-mail addresses of these interns. The questions focused on their experiences at the NHSRU and on how these experiences contributed to the use of research in their current workplace/practice.

Thirty-four responses were received (94% response rate). Information from the survey included qualitative and quantitative data. A thematic analysis of the responses was conducted for the qualitative data, which was then entered into the outcomes section of the logic framework. Appendix A shows the results of coding based on the participants' responses.

## Results

Using the logic model and Cooke's framework, Table 1 illustrates the inputs, activities, outputs and outcomes of the USRIP at McMaster University (Bates, 2009; Cooke, 2005; Cooke & Sarre, 2009).

**Table 1: Inputs, Activities, Outputs and Outcomes of the Undergraduate Student Research Internship Program at McMaster University**

Inputs	Activities	Outputs	Outcomes*
<ul style="list-style-type: none"> <li>Amount of time student interns affiliated with the unit. The program has been in existence for 20 years.</li> <li>Amount invested in student interns (\$0.25M).</li> <li>Resources: Overall funding, from the MOHLTC over 20 years: senior management, researchers, PI and co-PIs (\$9,106,830).</li> <li>Funding was leveraged from partners: McMaster University's MacWork Program, CIHR, CHSRF, CIDA, SSHRC, Ontario Critical Care Secretariat, OHA and CNO.</li> </ul>	<ul style="list-style-type: none"> <li>Writing/editing reports and research in action sheets</li> <li>Performing literature searches</li> <li>Presentations and interviews</li> <li>Teamwork</li> <li>Data input, synthesis and retrieval</li> <li>Critical appraisal of the literature</li> <li>Opportunities to collaborate (through conferences, meetings and presentations)</li> <li>Event organization</li> <li>Attending meetings (staff, MOHLTC, CNO, RNAO)</li> <li>International visitors</li> <li>Research projects</li> <li>Research process</li> <li>Hospitals</li> <li>Working with grad students</li> <li>Working with software</li> <li>Developing professional presentations (posters for 4I02)</li> <li>Attending educational and faculty events</li> <li>Participating in workshops</li> <li>Creating social networks</li> <li>Using search engines</li> <li>Deriving research questions</li> <li>Performing office procedures (communication/dissemination plans, telephone conference, netiquette)</li> <li>Training and mentoring future students</li> </ul>	<ul style="list-style-type: none"> <li>Student interns 1991–2011 (N=45)</li> <li>Average number of years in the unit:                             <ul style="list-style-type: none"> <li>Less than 12 months: 8 students</li> <li>12–36 months: 13 students</li> <li>24–36 months: 7 students</li> <li>More than 36 months: 5 students</li> <li>No answer: 1 student</li> </ul> </li> <li>Number of PIs, CoPIs from 1991–2011: N=54</li> <li>Number of publications, McMaster site: N=771</li> <li>Number of publications, McMaster site: interns N=59; NHSRU: N=18;</li> <li>post grad N=41</li> <li>Number of research studies, McMaster site: N=314</li> </ul>	<p><b>Skills and confidence</b></p> <ul style="list-style-type: none"> <li>Academic</li> <li>Writing Skills</li> <li>Communication skills</li> <li>Presentation skills</li> <li>Organizational skills</li> </ul> <p><b>Close to practice</b></p> <ul style="list-style-type: none"> <li>Evidence-based practice</li> <li>Recognizing the importance and impact of research in healthcare</li> <li>Influence of research on policy</li> </ul> <p><b>Linkages and collaborations</b></p> <ul style="list-style-type: none"> <li>Collaborations and networking</li> </ul> <p><b>Appropriate dissemination</b></p> <ul style="list-style-type: none"> <li>Research dissemination and knowledge translation</li> <li>Evidence-based practice</li> </ul> <p><b>Continuity and sustainability</b></p> <ul style="list-style-type: none"> <li>Career and educational decision making</li> <li>Evidence-based practice</li> <li>Collaboration and networking</li> </ul> <p><b>Infrastructures</b></p> <ul style="list-style-type: none"> <li>Networking and collaboration</li> </ul> <p><b>Research activity</b></p> <ul style="list-style-type: none"> <li>Better understanding of research process/tools                             <ul style="list-style-type: none"> <li>Literature searches</li> <li>Data entry</li> <li>Data synthesis</li> <li>Data retrieval</li> <li>Critical appraisal of literature</li> <li>Utilizing software</li> <li>Research designs and methodology</li> <li>Participating in focus groups</li> </ul> </li> <li>Research dissemination and knowledge translation</li> </ul> <p><b>Leadership</b></p> <ul style="list-style-type: none"> <li>Leadership opportunities</li> </ul> <p><b>Research culture</b></p> <ul style="list-style-type: none"> <li>Supportive research</li> </ul>

\* Based on the nine principles of capacity building (Cooke, 2005; Cooke & Sarre, 2009).

## Discussion

In this section, findings from the McMaster University Research Internship Program Survey are related to Cooke's (2005) principles of capacity building.

### Skills and Confidence Building

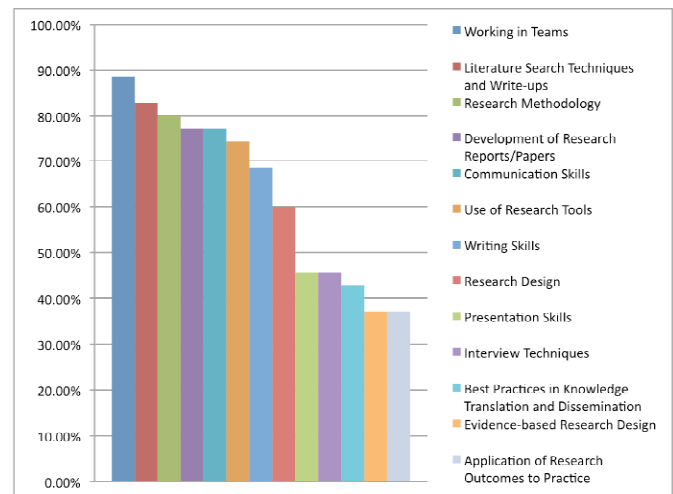
The expansion and reinforcement of research skills is supported by the creation of an environment of opportunities that encourages individuals to conduct and collaborate in research and apply acquired skills to practice (Cooke, 2005; Cooke & Sarre, 2009). Results from our survey coincide with the criteria for measuring skills and confidence level outlined in Cooke's (2005) framework.

Most of the survey participants confirmed the trend of progressive skills development and confidence building. They reported integrating learned skills in their practice and sharing them with their peers and colleagues. These results indicate that the USRIP offers its interns abundant research opportunities that foster skills and confidence development (see Table 1 for a list of activities). Most of the participants cited this as a key benefit of the internship program. One participant said,

*The opportunity to participate in arranging, conducting [and] summarizing key informant interviews re [the] Nursing Graduate Guarantee [NGG] gave me an inside perspective to the world of nursing practice and the skills and confidence to speak with other professionals and management regarding the NGG and how it impacts the greater nursing profession.*

Figure 1 shows the participants' responses when asked to identify which skills were learned or developed during their tenure at the NHSRU.

**Figure 1: Skills Learned/Developed During Students' Tenure at the Nursing Health Services Research Unit**



### Developing Research Close to Practice

The fundamental objective of research capacity in healthcare is to generate research that is relevant to practice with the purpose of providing quality care to patients and improving the health of individuals and families (Cooke, 2005). It is essential to incorporate elements of research as part of healthcare training and education so that practitioners become confident and independent (Ragunanth & Innes, 2004).

Developing research to support practice was identified as the second most frequent benefit when participants were asked, "What were the most beneficial aspects of being employed by the research unit?" Students also indicated they learned to appraise literature reviews, which contributed to their ability to think critically while applying the best available evidence in practice.

Survey results indicate that participants have developed critical thinking skills and clinical expertise in using research and provide evidence-based care. Comments included the following:

*The experience I have gained at the research unit has taught me the importance of research in many aspects of my nursing profession. For example, using current research to guide my clinical practice, keeping best practice guidelines current and up-to-date, conducting research to re-evaluate old practices and expand on current knowledge and promoting and strengthening the nursing profession.*

*I feel that with this experience, I will be able to facilitate change within my nursing practice environment that will positively impact the nursing workforce and patient safety.*

Participants also noted the importance of research in policy development. One participant commented,

*If it wasn't for the research unit, I wouldn't of understood, early in my nursing education, the macro and organizational structures that influence my practice as a nurse. It opens my eyes to the value of research and policy in influencing change in nursing practice.*

## Linkages and Collaborations

Partnerships and collaborations are significant elements of building capacity in research (Cooke, 2005). Collaboration within multidisciplinary settings facilitates learning and knowledge acquisition and dissemination. Sharing, developing and enhancing knowledge ensures the quality and success of research projects (Cooke, 2005). Students in the NHSRU learn

the importance of building partnerships with researchers, academia and health professionals. This allows them to enhance the use of research within their practice and further build their human capital by increasing their ability to do research.

Most of the survey participants indicated they interact with a number of professionals on a daily basis and work within interprofessional teams. The research unit offers a range of opportunities for collaboration between students, senior scientists and other key healthcare leaders. One participant stated, "When I was an intern in [the] RU, I attended meetings at the ministry. It was such an excellent learning experience on how to collaborate with decision makers. I am using these skills each day."

## Appropriate Dissemination

The ability to disseminate research through presentations, conferences and publications is another measure of building research capacity. It is suggested that the strategies used for dissemination should involve various methods, including care implementation, protocols, publications, factsheets, the media and the Internet (Cooke, 2005). During their time at the research unit, students were involved in generating factsheets, creating presentations and writing publications. One participant noted the experience gained at the research unit "will aid my future practice in clinical nursing by ... [providing] the ability to apply best available evidence to enhance quality of patient care as well as in research."

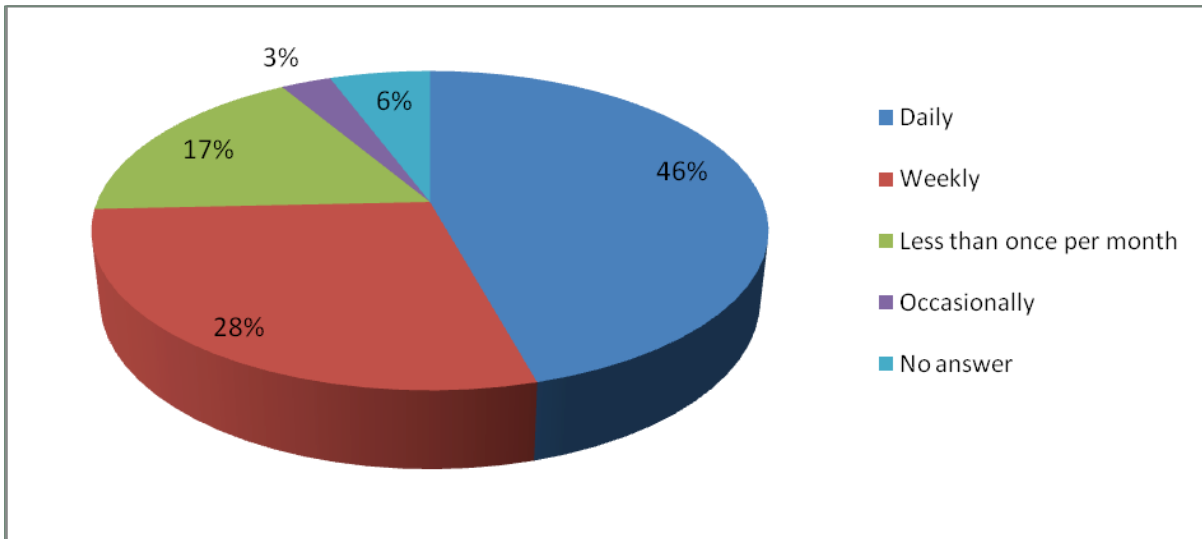
## Continuity and Sustainability

This principle suggests that capacity building in research should involve elements of sustainability that allow researchers to maintain learned skills, acquire new skills and participate in various research activities (Cooke,

2005). Participants were asked to indicate how often they use the skills learned at the research unit in their current positions. Forty-six percent of respondents reported using these skills daily, while 28% reported using them weekly (see Figure 2). Although this concept is not

well studied, it is suggested that capacity in research is sustained through the application of acquired skills to practice. This enables additional opportunities to learn new skills and advance further on the career ladder (Cooke, 2005).

**Figure 2: Frequency of Learned Skills Used in Current Positions**



Twelve participants indicated the internship program influenced their career decisions. Their responses suggest the program contributes to the sustainability of learned skills. Comments included the following:

*It allowed me to see possibilities that I had not yet anticipated. It allowed me to see the benefits of graduate level education and opened doors that I would not have been able to access on my own. It set the bar for professional goals and aspirations much higher than I had initially expected of myself when entering into nursing.*

*For me, it all started there--the mentors, the other RU students, the experiences and opportunities. Once you get involved, a*

*cultural/ideological shift takes place for the student that is hard to quantify other than by saying, I do not believe I would have accomplished what I have within my career had I not been involved in the RU.*

*I continue to seek evidence-based literature to support my practice, and am able to present this information to my colleagues in a more effective and efficient manner.*

## Infrastructure

This principle analyzes the structures in place that support research capacity and activity (Cooke & Sarre, 2009). This includes the NHSRU and its affiliated researchers, as well as funding provided by organizations such as the MOHLTC and McMaster University. Without the necessary infrastructure, students would not have had the opportunity to develop their research skills, knowledge and ability.

Many students said they would not have achieved and, in some cases, surpassed their ambitions without the support of the research unit. Reported benefits of working at the NHSRU included “the opportunity to interact with various individuals from different disciplines across the world” and “work and learn from a team of expert researchers to gain insight into research design, implementation and dissemination.”

## Research Activity

This principle measures activities driven by researchers within an organization, which are meant to augment and encourage capacity building (Cooke & Sarre, 2009). Interns at the NHSRU participated in a number of activities, including literature searches, learning about the research design process and presenting research through different media. These activities strengthened the students' research skills and abilities and led to a better understanding of the research process and tools.

Students cited various positive outcomes such as “learning how to perform literature searches, critically evaluating the literature and [both] observing and being part of the research design process.” One student reported, “My ability to conduct comprehensive literature searches, assisting in writing reports and papers and understanding the different research designs and methodologies has allowed me to excel in my research and problem-based learning classes.”

## Leadership

Leadership is integral to research capacity building and career development. According to the literature, individuals who take on leadership roles within teams and organizations are likely to have a successful career (Riaz & Haider, 2010). Based on the survey responses, many past interns are now leaders within their organizations. One participant noted,

*I was able to participate in leadership opportunities such as organizing conferences, attending meetings at the ministry, networking with researchers [and] working on posters, presentations and reports. All these skills were invaluable to my career development. With the repository of training I received at the research unit, I felt I had a true advantage over my peers when I graduated nursing school and started working.*

Another participant demonstrated her leadership capacity “by preceptoring and mentoring other nurses.”

## Research Culture

This principle highlights the importance of creating an environment in which research and researchers are valued, recognized and rewarded (Cooke & Sarre, 2009). Many participants felt that the NHSRU manifested this aspect of capacity building. They reported that the guidance, support and appreciation they received from the staff and other researchers encouraged them to do research, feel confident in their work and abilities and pursue advanced education.

## Summary and Conclusion

It is evident from the survey responses that the Undergraduate Student Research Internship Program offered through the NHSRU at McMaster University is a valuable and cost-effective approach to building research capacity. The investment made by the Ontario government, along with funds from other sources and organizations, has produced significant outcomes that support capacity building and innovation in research. Continuance of the program and expansion to other faculties and universities should be considered viable methods to build research capacity and invest in future healthcare leaders and decision makers.

## Recommendations

Based on feedback from the participants, the USRIP has been very beneficial to career advancement and research capacity building. The participants offered various suggestions to enhance the program and further support students in their ongoing research skills development:

1. Continue to seek funding opportunities to ensure continuance of the Undergraduate Student Research Internship Program.
2. Disseminate information regarding this successful undergraduate student internship model to enable broader adoption by other organizations.
3. Further enhance learning opportunities for the research intern by
  - Involving the student in the entire research process if timing of a project permits, including drafting a proposal and funding application, data analysis and drafting of summary/final reports.
  - Increasing involvement/attendance at networking opportunities and discussions with key healthcare leaders.
  - Enhancing the understanding of students in the processes required for successful publication.
  - Assigning each student a person to guide them regarding assigned activities and clarify any questions the student might have regarding the project.
4. Request that students define learning goals for their internship program. Assign a mentor to each student and request that the mentor and mentee meet regularly to discuss the student's learning, goals, projects, new opportunities and career planning in order to maximize the experience for the student.
5. Collaborate with employers of past interns to explore opportunities that these organizations might undertake to sustain and enhance the research skills of emerging health leaders.

## References

- Bates, I., Akoto, AYO, Ansong, D., Karikari, P., Bedu-Addo, G., et al. (2006). Evaluating health research capacity building: An evidence-based tool. *Public Library of Science*, 3(8) 3(8): e299. doi:10.1371/journal.pmed.0030299
- Bishop, V., & Freshwater, D. (2003). Capacity-building and careers in nursing research: Rational and context. *Nursing Times Research*, 8(6), 398-406.
- Canadian Institutes of Health Research. (2009). More about knowledge translation at CIHR. *Canadian Institutes of Health Research*. Retrieved from <http://www.cihr-irsc.gc.ca>
- Cooke, J. (2005). A framework to evaluate research capacity building in health care. *BioMed Central Family Practice*, 6(1), 44.
- Cooke, J., & Sarre, G. (2009). Developing indicators for measuring Research Capacity Development in primary care organizations: a consensus approach using a nominal group technique. *Health and Social Care in the Community*, 17(3), 244.
- Council of Academic Hospitals of Ontario. (2011). *Building a stronger Ontario through health research: Ideas for the 2011 Ontario Election*. Retrieved from, <http://www.caho-hospitals.com/wp-content/uploads/CAHO-2011-Election-Platform-Documents-FINAL.pdf>
- Frechtling, J. A. (2007). *Logic Modeling Methods in Program Evaluation*. San Francisco, CA: Jossey-Bass
- Hunt, J. C., Gruenewaldt, E., & Lyster, A. H. (2011). Engaging the next generation of health leaders: Perspectives of emerging health leaders. *Healthcare Management Forum*, 24(1), 4-8.
- Hunter, A., Laursen, S. L., & Seymour, E. (2007). Becoming a scientist: The role of undergraduate research in students' cognitive, personal, and professional development. *Science Education*, 91(1), 36-74. doi: 10.1002/sce.20173
- Hynie, M., Jensen, K., Johnny, M., Wedlock, J., & Phipps, D. (2011). Student internships bridge research to real world problems. *Journal of Education and Training*, 53(2/3), 237-248.
- Jamerson, P. A., Fish, A. F., & Frandsen, G. (2009). Nursing research assistant program: A strategy to enhance nursing research capacity building in a Magnet status pediatric hospital. *Applied Nursing Research*, 24(2), 110-113.
- McMaster University. (2011). *Canadian Institute of Health Research*. Retrieved from, [http://fhs.mcmaster.ca/healthresearch/research\\_fundingsource\\_cihr.html](http://fhs.mcmaster.ca/healthresearch/research_fundingsource_cihr.html)
- Ministry of Health and Long-Term Care. (2011). *Excellent Care for All*. Retrieved from, <http://www.health.gov.on.ca/en/ms/ecfa/public/default.aspx>
- Ontario Ministry of Research and Innovation. (2010). *MRI'S Results Based Plan*. Retrieved from, <http://www.mri.gov.on.ca/english/about/documents/Results%20Based%20Plan%200910.pdf>
- Raghunanth, A. S., & Innes, A. (2004). The case for multidisciplinary research in primary care. *Primary Health Care Research and Development*, 5, 264-273.
- Riaz, A., & Haider, M. H. (2010). Role of transformational and transactional leadership on job satisfaction and career satisfaction. *Business and Economic Horizons*, 1(1), 29-38.
- Whyte, D. A., Lugton, J., & Fawcett, T. N. (2000). Fit for purpose: The relevance of Masters preparation for the professional practice of nursing. A 10-year follow-up study of postgraduate nursing courses in the University of Edinburgh. *Journal of Advanced Nursing*, 31(5), 1072-1080.

# Appendix A. Coding Results Based on the Participants' Responses to the Capacity Building for the Nursing Health Services Research Unit: A Program Evaluation of the McMaster University Research Internship Program Survey

Themes	Questions	Quotes
<b>Skills and Confidence</b>		
<b>Academic</b> <ul style="list-style-type: none"> <li>• Writing skills</li> <li>• Communication skills</li> <li>• Presentation skills</li> <li>• Organizational skills</li> </ul>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• Professionalism in writing.</li> <li>• Developed academic writing skills.</li> <li>• Having opportunity to co-author several documents.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• Improved my communication skills.</li> <li>• My experience at the NHSRU solidified my teamwork and communication skills. The tools that I have gained will undoubtedly be of use in my next work experiences.</li> <li>• Enhanced writing skills.</li> <li>• In an office setting in general, which is crucial in my current position.</li> <li>• I experienced different culture work life, time planning and work planning.</li> <li>• Through my work at the research unit, I gained a confidence in my communication skills.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• The research unit has not influenced my career decisions; however, the skills that I learned have supported/strengthened my teaching role.</li> <li>• For a short period, I worked for a company developing healthcare educational products researching and writing the information.</li> <li>• I improved my English.</li> </ul>

Themes	Questions	Quotes
	<p><i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i></p>	<ul style="list-style-type: none"> <li>• I utilize the skills learned in the research unit in my teaching role... to communicate and work with others.</li> <li>• The communication techniques and strategies I learned in working closely with international delegates has greatly enhanced how I communicate with my palliative patients and their families now who are from all over the world.</li> <li>• My organization skills and the ability to find information and resources were improved so I am better able to coordinate projects and events.</li> <li>• I improved English, contact to person, communication skills, research skills, experiences different culture, research design.</li> <li>• The opportunity to participate in arranging, conducting and summarizing key informant interviews re: nursing graduate guarantee gave me an inside perspective to the world of nursing practice and the skills and confidence to speak with other professionals and management regarding the NGG and how it impacts the greater nursing profession. Participating with the background preparation work and later summarizing responses was also very valuable in helping me develop the transferable skills of asking the tough questions, summarizing findings and sharing key themes (which is a regular part of my current position as a public health nurse).</li> <li>• I learned organizational and management skills that are invaluable to me now.</li> <li>• Working in the unit gave me exposure to so many different topic areas in human resources, and gave it to me well before I "needed" it in my schoolwork. As a result, I was proficient in a number of skills before we formally learned them in classes. This freed me up to focus on content and helped me to excel academically.</li> </ul>
<b>Close to Practice</b>		
<b>Evidence-based practice</b>	<p><i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i></p>	<ul style="list-style-type: none"> <li>• The ability to apply research learned in class (methodology, designs learned, tools, etc) into current research--impact of research on current nursing practice/environment.</li> <li>• The connection was made for me between research and the practical everyday nursing on the floor.</li> <li>• Examined patient safety implication in some hospital.</li> <li>• Was able to apply knowledge in a variety of settings I have since encountered.</li> </ul>
	<p><i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experience.</i></p>	<ul style="list-style-type: none"> <li>• Provided me with better awareness of the importance of utilizing evidence-based literature in my nursing role and teaching role.</li> <li>• Using current research to guide my clinical practice, keeping best practice guidelines current and up-to-date, conducting research to re-evaluate old practices and expand on current knowledge and promoting and strengthening the nursing profession.</li> <li>• I believe this placement will make me more competent and evidence based in my PBL and research courses this coming year.</li> <li>• Research skills used for evidence-based practice.</li> <li>• I am certain that the skills and knowledge I have acquired from the Research Unit will assist me with the application of evidence-based research in my clinical practice.</li> <li>• My experience with the NHSRU gave me a greater appreciation of nursing research and helped me understand the relationship between research and practice.</li> <li>• I continue to seek evidence-based literature to support my practice, and am able to present this information to my colleagues in a more effective and efficient manner.</li> <li>• I feel that with this experience I will be able to facilitate change within my nursing practice environment that will positively impact the nursing workforce and patient safety.</li> <li>• More thorough practice and attention to evidence-based practice.</li> </ul>
	<p><i>Describe how your work at the Research Unit has influenced your career decisions.</i></p>	<ul style="list-style-type: none"> <li>• I can try to improve patient safety issues like patient falls and medication errors in my country.</li> <li>• The work at the research unit reinforced that I wanted to be involved in a nursing position where research, evidence and best practice was valued and where there was time to consider the best evidence and provide the best practice.</li> </ul>

Themes	Questions	Quotes
	<p><i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i></p>	<ul style="list-style-type: none"> <li>• I often find myself looking at various topics and wonder how it could become a research project to help inform and improve my current nursing practice.</li> <li>• My experience at the NHSRU will aid my future practice in clinical nursing by having to ability to apply best available evidence to enhance quality of patient care as well as in research.</li> <li>• As a public health nurse, I'm frequently using research in my work and am confident in my understanding of how the research applies to practice.</li> </ul>
<p><b>Recognizing the importance and impact of research in healthcare</b></p>	<p><i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i></p>	<ul style="list-style-type: none"> <li>• Exposure to research application for current nursing issues.</li> <li>• I can now understand how research is important, done and published.</li> <li>• I feel this experience also broadened my perspective on the nursing role at the unit.</li> <li>• It has also allowed me to gain knowledge of different organizations that are involved in the healthcare system and the roles that they play in making decisions on healthcare.</li> <li>• Expanding my perspective of nursing beyond the stereotypical role of the nurse.</li> <li>• Being educated on the role of nursing in Canada, e.g., New Graduate Guarantee, Internationally Educated Nurses.</li> <li>• Role of research in nursing.</li> <li>• To learn how research can directly and indirectly influence nursing practice.</li> <li>• Feeling included in a bigger picture that went beyond front-line nursing.</li> <li>• Created an excitement for nursing at a different level.</li> <li>• I think the most beneficial aspect of being employed by the NHSRU was getting the opportunity to recognize importance of nursing research and its application in today's growing society.</li> <li>• I also was able to gain insight into systems and structures that impact health services delivery both in Canada and internationally.</li> <li>• Gave me a good foundation of regarding research in nursing.</li> <li>• I also learned how to look at healthcare issues from a system, institutional and individual perspective.</li> </ul>

Themes	Questions	Quotes
	<p><i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i></p>	<ul style="list-style-type: none"> <li>• The experience I have gained at the research unit has taught me the importance of research in many aspects of my nursing profession. For example, using current research to guide my clinical practice, keeping best practice guidelines current and up-to-date, conducting research to re-evaluate old practices and expand on current knowledge and promoting and strengthening the nursing profession.</li> <li>• I have also gained a deeper insight into the nursing work environment. . . [this] has made me look at issues within the work environment from a broader perspective.</li> <li>• My involvement in research studies helped to . . . cultivate a keen interest in the application of health services research to inform health systems decisions.</li> <li>• This knowledge of research methodology has been critical to the work I have been engaged in following my tenure at the NHSRU.</li> <li>• Heightened my ability to recognize gaps in health-related research.</li> <li>• The importance of nursing practice being based on scientific evidence and that everything that we do as nurses should be grounded in better/best practices.</li> <li>• It has also made me aware of the workforce issues in nursing in Ontario.</li> <li>• The experience that I gained in the research unit has provided me with a solid foundation in health services and health human resources research.</li> <li>• Has given me a more thorough understanding of the healthcare system.</li> <li>• I entered medical school following my employment but my experiences in the unit have carried over well into my new career. I have an appreciation for the larger health system as well as a good understanding of nursing workload issues that should be pertinent to physicians as well, such as unrewarded teaching duties for nurses who work with medical learners. I also see the potential for better relationships between nursing and medicine through teamwork and communication.</li> <li>• It refined my understanding of nursing and health system issue.</li> <li>• The experience I have gained at the research unit has taught me the importance of research in many aspects of my nursing profession.</li> </ul>
	<p><i>Describe how your work at the Research Unit has influenced your career decisions.</i></p>	<ul style="list-style-type: none"> <li>• My experiences at the NHSRU increased my awareness of nursing workforce challenges, as well as the implications for healthcare service delivery.</li> <li>• To increase my understanding of the critical role of high-quality research in shaping effective health systems.</li> </ul>
	<p><i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i></p>	<ul style="list-style-type: none"> <li>• The general atmosphere and attitude of the research unit had a great influence on my approach to the profession. It taught me the importance of research and the nursing profession, to question everything and to seek answers.</li> <li>• Having being exposed to many of the faculty and seeing their continual efforts to be involved in the advancement of nursing through research has made me see the importance of keeping active and up to date with my profession.</li> <li>• In addition, in consideration of contemporary healthcare challenges, conducting research on topics such as health human resource planning provided an in-depth understanding of the functioning of the healthcare system, as well as the weaknesses, thus providing insight on how to construct a healthcare system that is responsive to emerging demands for healthcare services.</li> <li>• My experience provided me with an understanding of research related to health systems and health human resource issues, particularly those relevant to the nursing workforce. This helped to foster an appreciation and passion for high quality evidence to inform health services effectiveness and efficiency.</li> <li>• If it wasn't for the research unit, I wouldn't of understood, early in my nursing education the macro and organizational structures that influence my practice as clinical nurse. It opens my eyes to the value of research and policy in influencing change in nursing practice.</li> <li>• I feel that through this position I was presented with a fuller "picture" of the healthcare system that I would not have seen through the nursing program alone.</li> </ul>

Themes	Questions	Quotes
<b>Influence of research on policy</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• Exposure to other facets of nursing and gaining a deeper understanding of the importance of research in the development of policy.</li> <li>• I also learned a great deal about how research is translated into policy.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• Through my work as a research intern I have gained an understanding of how research influences policy change.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• I learned about health policy at various levels of government and how such policies can influence health services, workplaces and health of populations served.</li> <li>• It opens my eyes to the value of research and policy in influencing change in nursing practice.</li> </ul>
<b>Linkages and Collaborations</b>		
<b>Collaborations and networking</b> <ul style="list-style-type: none"> <li>• Collaborating</li> <li>• Networking</li> <li>• Working in teams</li> </ul>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• Working with a world-class team.</li> <li>• Also, learning more about professional communication and developing teamwork skills.</li> <li>• Experience working with nursing research professionals.</li> <li>• I experienced contact to important institute and famous hospital managers.</li> <li>• Networking with researchers and certain projects.</li> <li>• Interactions with international guests.</li> <li>• Development of social skills in dealing with individuals--exposure to credible organizations and the opportunities these may have.</li> <li>• The opportunity to work with and learn from a team of expert researchers to gain insight into research design, implementation and dissemination.</li> <li>• I had opportunities to develop connections with experienced researchers. The most beneficial aspect of working at the research unit was having the opportunity to interact with various individuals from different disciplines across the world.</li> <li>• Multidisciplinarity.</li> <li>• Opportunity to work with an amazing team and learn from the experts.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• The connections that I made at the research unit have provided me with a great start for networking within nursing.</li> <li>• I first got experience working in teams. I also use information systems in school and occasionally for work.</li> <li>• I learned contact to important person.</li> <li>• I also learn how to work with decision makers.</li> <li>• The most important is I met a team (coordinator, secretary, researchers, Dr. Baumann) who share great values (teamwork, respect, collaboration, excellence).</li> <li>• I must say that I never met such a team in this competitive field.</li> <li>• This has improved my ability to interact with other healthcare professionals.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• Through my work with the Global Health Office, I have further developed my passion to meet the needs of people globally and made connections with key leaders of the future, which may come into play further into my career.</li> </ul>

Themes	Questions	Quotes
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• During my time as a student intern, I have had the opportunity to connect with other faculty members in the School of Nursing and as a result, I will be part of the Health in the Hubs project starting in September as an individual studies course.</li> <li>• I learned about this opportunity through a previous student intern at the NHSRU.</li> <li>• When I was intern in RU, I attend meetings at the ministry; it was such an excellent learning how to collaborate with decision makers. I am using these skills each day.</li> <li>• To interact with healthcare administrators and government people to influence healthcare policy.</li> <li>• Community health is an aspect of nursing that I am very interested in, and this opportunity will allow me to use my research skills that I have developed at the unit to work collaboratively with members of the community as well as other students from various disciplines to construct a literature review.</li> </ul>
<b>Appropriate Dissemination</b>		
<b>Research dissemination &amp; KT</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• To gain insight into...dissemination.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• This experience (e.g., coding qualitative studies) is transferable.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• Ability to disseminate quality research...as well as providing me with the opportunity to apply my knowledge of research methods in a research setting.</li> <li>• My experiences in the research unit prompted me to seek learning opportunities such as EIDM workshops and to encourage my employer to mandate this for all program resource people in our division.</li> <li>• The skills that I have been developing at the research unit will allow me to be a positive contribution to my team.</li> <li>• I hope this opportunity will allow me to learn more about putting research into action.</li> </ul>
<b>Evidence-based practice</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• The ability to apply research learned in class (methodology, designs learned, tools, etc.) into current research--impact of research on current nursing practice/environment.</li> <li>• The connection was made for me between research and the practical everyday nursing on the floor.</li> <li>• Examined patient safety implication in some hospital.</li> <li>• Was able to apply knowledge in a variety of settings I have since encountered.</li> </ul>

Themes	Questions	Quotes
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• Provided me with better awareness of the importance of utilizing evidence-based literature in my nursing role and teaching role.</li> <li>• Using current research to guide my clinical practice, keeping best practice guidelines current and up-to-date, conducting research to re-evaluate old practices and expand on current knowledge and promoting and strengthening the nursing profession.</li> <li>• I believe this placement will make me more competent and evidence based in my PBL and research courses this coming year.</li> <li>• Research skills used for evidence-based practice.</li> <li>• I am certain that the skills and knowledge I have acquired from the research unit will assist me with the application of evidence-based research in my clinical practice.</li> <li>• My experience with the NHSRU gave me a greater appreciation of nursing research and helped me understand the relationship between research and practice.</li> <li>• I continue to seek evidence-based literature to support my practice, and am able to present this information to my colleagues in a more effective and efficient manner.</li> <li>• I feel that with this experience I will be able to facilitate change within my nursing practice environment that will positively impact the nursing workforce and patient safety.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• More thorough practice and attention to evidence-based practice.</li> <li>• I can try to improve patient safety issues like patient falls and medication errors in my country.</li> <li>• The work at the research unit reinforced that I wanted to be involved in a nursing position where research, evidence and best practice was valued and where there was time to consider the best evidence and provide the best practice.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• I often find myself looking at various topics and wonder how it could become a research project to help inform and improve my current nursing practice.</li> <li>• My experience at the NHSRU will aid my future practice in clinical nursing by having to ability to apply best available evidence to enhance quality of patient care as well as in research.</li> <li>• As a public health nurse, I'm frequently using research in my work and am confident in my understanding of how the research applies to practice.</li> </ul>
<b>Continuity and Sustainability</b>		
<b>Career</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• My experience at the unit was the impetus for my research career.</li> <li>• Certainly inspired the pursuit of higher education beyond the BScN degree.</li> <li>• Career guidance from nursing leaders.</li> <li>• It allowed me to see possibilities that I had not anticipated. It allowed me to see the benefits of graduate level education and opened doors that I would not have been able to access on my own. It set the bar for professional goals and aspirations much higher than I had initially expected of myself when I entered into nursing.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• My experience at the unit is what inspired me to pursue a PhD in nursing and become an academic.</li> <li>• Working at the research unit was a significant contributing factor to my decision to pursue my master's degree. (Thank you!)</li> <li>• Based on my experience, I ended up focusing my masters thesis on quality of worklife for nurses.</li> </ul>

Themes	Questions	Quotes
	<p><i>Describe how your work at the Research Unit has influenced your career decisions.</i></p>	<ul style="list-style-type: none"> <li>• Exposure to international research and opportunities.</li> <li>• Need for continuing education.</li> <li>• I believe my work at the research unit has provided me with a strong foundation to push myself further. Working at the research unit showed me the importance of higher education and the opportunities that are presented when you have completed graduate work.</li> <li>• Outside of the school aspect, during my time of work, the research unit reinforced my developing idea of my career path to work within community nursing.</li> <li>• It was probably a factor in my practical research based interests in my field, which I intend to pursue in the future.</li> <li>• The experience gained at the NHSRU inspired an interest in health human resource planning and health systems strengthening, which has been the focus of my work experiences and graduate studies.</li> <li>• I think my time at the research unit gave me the confidence to pursue just about anything I wanted to. In the end, I was accepted both for a PhD in nursing at the University of California in San Francisco and medical school at McMaster. The decision as to which to pursue was both a personal and professional choice. However, I would have been quite happy pursuing the PhD.</li> <li>• Although I've only been here a short time, working at the NHSRU has allowed me to consider completing graduate studies after my BScN.</li> <li>• My career decisions haven't changed drastically but the contribution of working at the research unit has given me the insight into how I can incorporate different aspects of nursing into my career. Although I still intend to work as a front-line nurse, I hope to be involved in research to advocate for the profession, for people and for healthcare in general.</li> <li>• My career has been significantly influenced by my experience of being involved with the research unit. As indicated in question 6, the experiences directed me on a path of valuing a higher level of nursing education and opened the door to graduate level education, something that I had not considered prior to this experience.</li> <li>• Although I felt competent to practice after McMaster, having the opportunity to develop a higher, more specialized level of competencies within the Advance Practice Nurse curriculum at the University of Alberta changed everything for me. First, I became more effective within my nursing practice role but also, it allowed for career advancement in a time frame and to a level that likely would not have occurred for me.</li> <li>• For me, it all started there--the mentors, the other RU students, the experiences and opportunities. Once you get involved, a cultural/ideological shift takes place for the student that is hard to quantify other than by saying I do not believe that I would have accomplished what I have within my career had I not been involved in the RU.</li> <li>• I chose to work in public health doing program work where a large part of my role entails doing lit. searches, searching evidenced-based strategies, r/t health promotion, evaluating the health promotion strategies we've implemented collaborating with epidemiologists and other health units, community partners and with researchers in implementing health promotion strategies and in data collection through various strategies and analysis of data.</li> <li>• It made me fall in love with research and was the impetus behind pursuing my PhD.</li> <li>• As a new doctor, I chose to go into family medicine because I saw the greatest potential for true interdisciplinary work with nursing. My time at the unit has proven that when medicine and nursing are a team, great outcomes can be achieved.</li> <li>• My experience at the unit has influenced my decision to pursue further education. Prior to this internship, I was interested solely in a course-based masters. Now having experienced research first hand, I am very keen to complete a master's thesis as well.</li> <li>• It has definitely played a role in me pursuing my masters after leaving McMaster and in maintaining involvement in research.</li> <li>• I have pursued a master's degree and I am starting a PhD program in the fall.</li> </ul>

Themes	Questions	Quotes
		<ul style="list-style-type: none"> <li>• My work at the NHSRU confirmed my interest in nursing because I had opportunities to understand the variety of positions that were available within nursing. It also sparked an interest in research and confirmed that I was interested in pursuing a master's degree.</li> <li>• My work at the RU with Dr. Baumann and her team influence my behavior as a researcher. I learned that it is important to work with good persons (personally and professionally), work hard and with pleasure to succeed. It has worked for me.</li> <li>• Although I have not been able to use my research skills in any significant manner in my current career, my ideal job would have a larger component of research in it. I plan on changing jobs soon and will be looking for those opportunities.</li> <li>• I am currently pursuing a PhD in nursing. My work at the research unit helped to foster my interest in research.</li> <li>• My time at the unit has made me realize how important it is to be truly passionate about what I am learning. I highly enjoyed working here and it has influenced my decision to pursue research as part of the next stage in my professional career.</li> <li>• My work experience at the research unit has inspired me to set a focused goal in pursuing further education in the field of research by obtaining a Master's degree and eventually completing my PhD.</li> </ul>
	<p><i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i></p>	<ul style="list-style-type: none"> <li>• The experience gained at the NHSRU has been instrumental to my professional development. It provided me with the opportunity to explore the professional avenues I could pursue, as well as to understand the limitations of particular roles. I feel that being able to do this as well as referencing my time spent at the research unit has helped me to achieve various things such as entry into graduate school, employment and has opened up some opportunities that otherwise would have not been available to me.</li> <li>• I've furthered my understanding of research through graduate courses and other training since my time with the NHSRU but my initial experiences with NHSRU were valuable in providing a strong foundation.</li> <li>• Through having nursing and academic leaders to look up to, I have been able to paint a different path to my nursing career versus my initial thoughts of nursing.</li> <li>• Experience at the research unit has helped shape my future goals as a registered nurse, as well as, a healthcare professional.</li> <li>• It has influenced my decisions to pursue further education and has helped me identify tools that I can access to facilitate change within my personal work environment.</li> <li>• The NHSRU has shaped my professional development in every way by...propelling me into graduate nursing studies.</li> </ul>
<p><b>Evidence-based practice</b></p>	<p><i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i></p>	<ul style="list-style-type: none"> <li>• The ability to apply research learned in class (methodology, designs learned, tools, etc.) into current research--impact of research on current nursing practice/environment.</li> <li>• The connection was made for me between research and the practical everyday nursing on the floor.</li> <li>• Examined patient safety implication in some hospital.</li> <li>• Was able to apply knowledge in a variety of settings I have since encountered.</li> </ul>

Themes	Questions	Quotes
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• Provided me with better awareness of the importance of utilizing evidence-based literature in my nursing role and teaching role... using current research to guide my clinical practice, keeping best practice guidelines current and up-to-date, conducting research to re-evaluate old practices and expand on current knowledge and promoting and strengthening the nursing profession.</li> <li>• I believe this placement will make me more competent and evidence based in my PBL and research courses this coming year.</li> <li>• Research skills used for evidence-based practice.</li> <li>• I am certain that the skills and knowledge I have acquired from the Research Unit will assist me with the application of evidence-based research in my clinical practice.</li> <li>• My experience with the NHSRU gave me a greater appreciation of nursing research and helped me understand the relationship between research and practice.</li> <li>• I continue to seek evidence-based literature to support my practice, and am able to present this information to my colleagues in a more effective and efficient manner.</li> <li>• I feel that with this experience I will be able to facilitate change within my nursing practice environment that will positively impact the nursing workforce and patient safety.</li> <li>• More thorough practice and attention to evidence-based practice.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• I can try to improve patient safety issues like patient falls and medication errors in my country.</li> <li>• The work at the research unit reinforced that I wanted to be involved in a nursing position where research, evidence and best practice was valued and where there was time to consider the best evidence and provide the best practice.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• I often find myself looking at various topics and wonder how it could become a research project to help inform and improve my current nursing practice.</li> <li>• My experience at the NHSRU will aid my future practice in clinical nursing by having to ability to apply best available evidence to enhance quality of patient care as well as in research.</li> <li>• As a public health nurse, I'm frequently using research in my work and am confident in my understanding of how the research applies to practice.</li> </ul>
<b>Collaborations and networking</b> <ul style="list-style-type: none"> <li>• Collaborating</li> <li>• Networking</li> <li>• Working in teams</li> </ul>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• Working with a world-class team.</li> <li>• Also, learning more about professional communication and developing teamwork skills.</li> <li>• Experience working with nursing research professionals.</li> <li>• I was experienced contact to important institute and famous hospital managers.</li> <li>• Networking with researchers and certain projects.</li> <li>• Interactions with international guests.</li> <li>• Development of social skills in dealing with individuals--exposure to credible organizations and the opportunities these may have.</li> <li>• The opportunity to work with and learn from a team of expert researchers to gain insight into research design, implementation and dissemination.</li> <li>• I had opportunities to develop connections with experienced researchers.</li> <li>• The most beneficial aspect of working at the research unit was having the opportunity to interact with various individuals from different disciplines across the world.</li> <li>• Multidisciplinarity.</li> <li>• Opportunity to work with an amazing team and learn from the experts.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• The connections that I made at the research unit have provided me with a great start for networking within nursing.</li> <li>• I first got experience working in teams. I also use information systems in school and occasionally for work.</li> <li>• I learned contact to important person.</li> <li>• I also learn how to work with decision makers. The most important is I met a team (coordinator, secretary, researchers, Dr. Baumann) who share great values (teamwork, respect, collaboration, excellence). I must say that I never met such a team in this competitive field.</li> <li>• This has improved my ability to interact with other healthcare professionals.</li> </ul>

Themes	Questions	Quotes
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>Through my work with the Global Health Office, I have further developed my passion to meet the needs of people globally and made connections with key leaders of the future, which may come into play further into my career.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>During my time as a student intern, I have had the opportunity to connect with other faculty members in the School of Nursing and as a result, I will be part of the Health in the Hubs project starting in September as an individual studies course. I learned about this opportunity through a previous student intern at the NHSRU.</li> <li>When I was intern in RU, I attend meetings at the ministry; it was such an excellent learning how to collaborate with decision makers. I am using these skills each day.</li> <li>To interact with healthcare administrators and government people to influence healthcare policy.</li> <li>Community health is an aspect of nursing that I am very interested in, and this opportunity will allow me to use my research skills that I have developed at the unit to work collaboratively with members of the community as well as other students from various disciplines to construct a literature review.</li> </ul>
<b>Infrastructures</b>		
<b>Collaborations and networking</b> <ul style="list-style-type: none"> <li>Collaborating</li> <li>Networking</li> <li>Working in teams</li> </ul>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>Working with a world-class team.</li> <li>Learning more about professional communication and developing teamwork skills.</li> <li>Experience working with nursing research professionals.</li> <li>I was experienced contact to important institute and famous hospital managers.</li> <li>Networking with researchers and certain projects.</li> <li>Interactions with international guests.</li> <li>Development of social skills in dealing with individuals--exposure to credible organizations and the opportunities these may have.</li> <li>The opportunity to work with and learn from a team of expert researchers to gain insight into research design, implementation and dissemination.</li> <li>I had opportunities to develop connections with experienced researchers.</li> <li>The most beneficial aspect of working at the research unit was having the opportunity to interact with various individuals from different disciplines across the world.</li> <li>Multidisciplinarity.</li> <li>Opportunity to work with an amazing team and learn from the experts.</li> </ul>
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>The connections that I made at the research unit have provided me with a great start for networking within nursing.</li> <li>I first got experience working in teams. I also use information systems in school and occasionally for work.</li> <li>I learned contact to important person.</li> <li>I also learn how to work with decision makers. The most important is I met a team (coordinator, secretary, researchers, Dr. Baumann) who share great values (teamwork, respect, collaboration, excellence). I must say that I never met such a team in this competitive field.</li> <li>This has improved my ability to interact with other healthcare professionals.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>Through my work with the Global Health Office, I have further developed my passion to meet the needs of people globally and made connections with key leaders of the future, which may come into play further into my career.</li> </ul>

Themes	Questions	Quotes
	<p><i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i></p>	<ul style="list-style-type: none"> <li>• During my time as a student intern, I have had the opportunity to connect with other faculty members in the School of Nursing and as a result, I will be part of the Health in the Hubs project starting in September as an individual studies course. I learned about this opportunity through a previous student intern at the NHSRU.</li> <li>• When I was intern in RU, I attend meetings at the ministry; it was such an excellent learning how to collaborate with decision makers. I am using these skills each day.</li> <li>• To interact with healthcare administrators and government people to influence healthcare policy.</li> <li>• Community health is an aspect of nursing that I am very interested in, and this opportunity will allow me to use my research skills that I have developed at the unit to work collaboratively with members of the community as well as other students from various disciplines to construct a literature review.</li> </ul>
<b>Research Activity</b>		
<p><b>Better understanding of research process/tools</b></p> <ul style="list-style-type: none"> <li>• Literature searches</li> <li>• Data entry</li> <li>• Data synthesis</li> <li>• Data retrieval</li> <li>• Critical appraisal of literature review</li> <li>• Utilizing software</li> <li>• Research designs and methodology</li> <li>• Participating in focus groups</li> </ul>	<p><i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i></p>	<ul style="list-style-type: none"> <li>• To gain insight into research design, implementation.</li> <li>• Performing literature searches.</li> <li>• Participating in research projects.</li> <li>• I learned so much about data management and data entry.</li> <li>• The most beneficial aspects of being employed by the research unit were learning to how to perform literature searches, critically evaluating the literature and observing and being part of the research design process.</li> <li>• I became more familiar with navigating information systems and became more sensitive to an unrelated field.</li> <li>• It provided me with an introduction to research and all that it entails (e.g., research methodology, literature searches, dissemination of research findings, development of presentation skills, teamwork, etc.).</li> <li>• I can now understand how research is important, done and published.</li> <li>• Professionalism in writing.</li> <li>• Learning more about the research process and how research is conducted.</li> <li>• Introduction to the inner workings of a nursing research project.</li> <li>• I learned about research planning (design, methodology, writing, etc.). Greater understanding of research methods.</li> <li>• Learning about the research process--strengthening my literature search skills.</li> <li>• It was a fantastic opportunity to learn about research.</li> <li>• Exposure to tools and strategies, r/t evidence gathering (lit. reviews, use of search engines and data collection from survey questionnaires using programs such as SPSS). I find that my ability to conduct comprehensive literature searches, assisting in writing reports and papers and understanding the different research designs and methodologies have allowed me to excel in my research and problem based learning classes.</li> <li>• Being exposed to evidenced based research--gaining understanding of research process - being exposed to data entry and synthesis.</li> <li>• I learned the most from the research process.</li> <li>• The opportunity to work with and learn from a team of expert researchers to gain insight into research design, implementation and dissemination.</li> <li>• To learn how researchers are collaborating with decision makers.</li> <li>• I also gained knowledge about research methods and designs.</li> <li>• Gain an understanding of some of the practical aspects of a research project.</li> <li>• It provided me with strong mentorship in research training.</li> <li>• Understanding how to effectively retrieve relevant research.</li> </ul>

Themes	Questions	Quotes
		<ul style="list-style-type: none"> <li>• Learning the process of research from stuffing envelopes and entering data to presenting at conferences. I had the opportunity to be involved at every stage of several studies both qualitative and quantitative.</li> <li>• Mixed method research.</li> <li>• Exposure to almost every component of the research process.</li> <li>• Participating in focus groups.</li> <li>• How information is disseminated through a number of avenues.</li> </ul>
	<p><i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i></p>	<ul style="list-style-type: none"> <li>• Critique research articles.</li> <li>• Brought to presentation &amp; formulate questions based on that.</li> <li>• Look for research opportunities on the unit (question why we do something or why a specific demographic is predisposed to a certain disease/illness).</li> <li>• My involvement in research studies helped to strengthen my understanding of the research process and cultivate a keen interest in the application of health services research to inform health systems decisions. This knowledge of research methodology has been critical to the work I have been engaged in following my tenure at the NHSRU.</li> <li>• Following my BScN degree, I went on to work at IBM Canada as an occupational health nurse. At the time, IBM's Ergonomics Program was in need of a significant overhaul. The problem solving, research and critical thinking skills learned during my time in the research unit were extremely helpful...as far as I know, the program is still in use today, though I moved on from IBM more than 15 years ago.</li> <li>• My ability to seek out the most relevant information and understand the process which will need to be undertaken to fill gaps in nursing research.</li> <li>• The importance of following "process," something that I think a lot of nurses forget about.</li> <li>• I can plan research myself in my country.</li> <li>• I look at research and best practice recommendations with a critical eye; feel more confident conducting literature searches for my practice; feel more comfortable summarizing articles and pulling out key themes.</li> <li>• When our supports (epidemiologists, data analysts, research analysts, librarian, etc.) are limited or have been prioritized elsewhere, I have the ability to do my own lit. &amp; grey lit. searches for evidenced-based strategies in health promotion. If none are to be had (or there are no promising emerging strategies), I collaborate with others in developing &amp; evaluating new strategies using data collection. Results we obtain are used to direct changes to, or scrapping of the strategy, etc. Results (whether the strategy was successful or not) are transferred to other regions and health units, especially in light of little evidenced effective health promotion strategies in our field.</li> <li>• I have had taken and sought opportunities to work with researchers from various universities on health promotion initiatives and/or their research related to my field. I've tried to advocate to get programs/tools (e.g., SPSS, Reference Manager, etc.) for efficiency and effectiveness for resource/program PHNs--especially in light of limited supports and we are sometimes collecting and evaluating our own data. Still working on getting these programs! I support learning opportunities for nursing students and provide placement opportunities. I know how important a positive learning environment is for a student and to feel included into a team. I try to ensure that they get to experience a healthy workplace/environment is.</li> <li>• Understand the importance of completing lit reviews and applied skills gained as recently completed lit review/summaries in childhood injuries as moved into resource role--planning to request purchase of SPSS to synthesize survey data within program (exposed to SPSS at research unit).</li> <li>• My experience at the NHSRU solidified my research skills and methodology.</li> <li>• Has made me very comfortable when asked to deal with research, translating of research etc. Made my graduate courses in research methods a breeze!</li> <li>• Use of research tools.</li> <li>• I also have greater confidence in my research skills.</li> <li>• Enhanced my research skills strengthen my understanding of the research process.</li> </ul>

Themes	Questions	Quotes
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• The research unit has not influenced my career decisions; however, the skills that I learned have supported/strengthened my teaching role.</li> <li>• Although I have always worked at the bedside as my primary position, I have sought out other opportunities related to research to enhance my knowledge. I have been involved in several research projects at work collecting data and performing chart reviews.</li> <li>• The unit has given me the opportunity to see the role that research plays in these aspects as well as the process of conducting research.</li> <li>• I chose to work in public health doing program work where a large part of my role entails doing lit. searches, searching evidenced-based strategies, r/t health promotion, evaluating the health promotion strategies we've implemented, collaborating with epidemiologists and other health units, community partners and with researchers in implementing health promotion strategies and in data collection through various strategies and analysis of data.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• I improved English, contact to person, communication skills, research skills, experiences different culture, research design.</li> <li>• This experience will contribute to my ability to rapidly search relevant literature and critically appraise it.</li> <li>• The experience gained from engaging in the research process will help me when I am working on my masters.</li> <li>• 1. Learning to establish, re-assess and adhere to multiple deadlines 2. Recognizing the common requirement, in research, to clearly establish and prove a trend or requirement before discussing possible solutions. 3. The benefits and difficulties of numerous well-trained researchers collaborating on a single project.</li> <li>• This job has changed my perceptive on research. It has allowed me to grow as an individual in many areas (communication, teamwork, writing skills, conducting comprehensive literature searches, etc.) and provided me with a practical research experience exemplifying many aspects of collaborative research.</li> <li>• My experience at the research unit has helped me recognize that research is often a messy process. For example, in some situations, something unexpected would happen that put us behind schedule or that forced us to look for different ways to overcome a certain barrier. It has helped my professional learning and development by motivating me to think and act more flexibly.</li> <li>• With the experience I gained at the research unit, there are several times where I have had to speak intelligently regarding research design or methodology.</li> <li>• My experience with the NHSRU provided a foundation and basic knowledge of research concepts that I've built on throughout my career (both as a student and professional nurse). It helped me excel in undergrad research courses and allowed me a more complete understanding of how research interacts with practice.</li> <li>• The NHSRU has shaped my professional development in every way by forming research ability...I really learned to appreciate qualitative research through my work with the unit. I also learned how to appropriately critique research.</li> <li>• One experience I had at the unit was to write my very first publication. It was an annotated bibliography of research on nurse-run centres in Canada.</li> </ul>
<b>Research dissemination &amp; KT</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• To gain insight into...dissemination.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• This experience (e.g. coding qualitative studies) is transferable.</li> </ul>

Themes	Questions	Quotes
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• Ability to disseminate quality research.</li> <li>• Providing me with the opportunity to apply my knowledge of research methods in a research setting.</li> <li>• My experiences in the research unit prompted me to seek learning opportunities such as EIDM workshops and to encourage my employer to mandate this for all program resource people in our division.</li> <li>• The skills that I have been developing at the research unit will allow me to be a positive contribution to my team. I hope this opportunity will allow me to learn more about putting research into action.</li> </ul>
<b>Leadership</b>		
<b>Leadership opportunities</b>	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>• I worked as a Research Assistant after leaving the NHSRU with another study at McMaster in the Health, Aging and Society sector. I have also learned how to become independent in searching for current literature when it comes to the needs of my working environment.</li> <li>• I was able participate in leadership opportunities such as organizing conference, attending meeting at the ministry, networking with researchers, working on posters, presentations and reports. All these skills were invaluable to my career development. With the repository of training I received at the research unit, I felt I had a true advantage over my peers when I graduated nursing school and started working in the workforce.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>• I have also shared my knowledge by preceptoring and mentoring other nurses.</li> <li>• I currently have undertaken a position in mental health; the area which I believe has the most opportunity for breakthrough nursing research.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>• This experience has already helped me educate my peers on many Canadian nursing workforce issues and findings (e.g., Nursing Graduate Guarantee).</li> <li>• I feel that this makes me an asset to my nursing unit because in moments of conflict I can provide a fresh perspective different from my nursing colleagues.</li> </ul>
<b>Research Culture</b>		
<b>Supportive research environment</b>	<i>For you, what were the most beneficial aspects of being employed by the Research Unit?</i>	<ul style="list-style-type: none"> <li>• Working amongst a cohesive team who worked to plan and carry out research projects.</li> <li>• I had never worked in this type of environment before, so it was interesting to see and be a part of the dynamic.</li> <li>• The people affiliated with the unit were very kind with there time to assist us in both our education and employment (specifically Laurie Kennedy).</li> <li>• Working alongside the researchers and staff at the NHSRU provided the opportunity to learn what was possible beyond undergraduate studies, as well as the many avenues available to nursing graduates.</li> <li>• It provided me with strong mentorship in research training.</li> <li>• I believe that I gained a great deal of experience and given my knowledge base at the time, I don't believe that I could have done too much differently to enhance my experience.</li> <li>• Before I came to the research unit, I did a learning plan and shared it with Dr. Baumann. She is perfect facilitator for me. She guided very well to me. It is very important to guide.</li> <li>• Exposure to McMaster nursing education philosophy and curriculum is very relevant as I work with many McMaster graduates.</li> </ul>

Themes	Questions	Quotes
	<i>Describe how the experience you have gained at the Research Unit has influenced your nursing practice or work experiences.</i>	<ul style="list-style-type: none"> <li>This has improved my ability to interact with other healthcare professionals and has given me a more thorough understanding of the healthcare system.</li> </ul>
	<i>Describe how your work at the Research Unit has influenced your career decisions.</i>	<ul style="list-style-type: none"> <li>For me, it all started there--the mentors, the other RU students, the experiences and opportunities. Once you get involved, a cultural/ideological shift takes place for the student that is hard to quantify other than by saying I do not believe that I would have accomplished what I have within my career had I not been involved in the RU.</li> <li>I believe my work at the research unit has provided me with a strong foundation to push myself further.</li> </ul>
	<i>Please describe an example of how the experience you gained while working at the Research Unit has contributed to your overall professional learning and development.</i>	<ul style="list-style-type: none"> <li>This job has changed my perspective on research. It has allowed me to grow as an individual in many areas (communication, teamwork, writing skills, conducting comprehensive literature searches, etc.) and provided me with a practical research experience exemplifying many aspects of collaborative research.</li> <li>Overall, the research unit was a great place to help me develop my professional self.</li> <li>Working at the research unit helped catapult my academic achievement during my final year and is an experience that I will carry with me forever.</li> </ul>

\* Adapted from Cooke, 2005; Cooke & Sarre, 2009

\*\* From Capacity Building for the Nursing Health Services Research Unit: A Program Evaluation of the McMaster University Research Internship Program Survey

\*\*\* From survey participants



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