# Final Assessment Report Health Studies (BSc) Health Studies and Gerontology (MSc, PhD) Master of Public Health (MPH) May 2014

### **Review Process**

The School of Public Health and Health Systems came into existence in 2011, from the previously-named Department of Health Studies and Gerontology. The change occurred in part due to ongoing changes in programming, and in the vision for where the unit was going. The School aims to be Canada's most innovative and impactful academic unit in the area of population and public health. The academic unit has a history of innovation, having been the first in Canada to offer a non-medical perspective on health promotion and disease prevention (in 1978) and having offered the first free-standing graduate program in Gerontology in Canada (in 1987), and it continues to offer an integrated biological and behavioral approach.

The School has a variety of new programs; those retained from the previous Department have not as yet changed their names. This review covers the undergraduate BSc in Health Studies (both regular and co-op), the MSc and the PhD in Health Studies and Gerontology, as well as the Master of Public Health (which began in 2006). A new undergraduate degree (the Bachelor of Health Promotion), and a new field in the Master of Health Informatics both began in 2013, but are too new to review; and another new program (the Master of Health Evaluation) is expected to take its first students in 2015. The review also does not cover the Collaborative PhD programs in Aging, Health and Well-Being, or in Work and Health, which received a separate review in 2012/13. Both programs are jointly offered by all three Departments/Schools in the Faculty of Applied Health Sciences.

The Self Study was led initially by the inaugural School Director, who left mid-year for another opportunity, and the process was seen through by the two Interim Directors. The three Associate Directors (for undergraduate, graduate research, and graduate professional programs) also provided support, and a Special Projects Coordinator was hired to assist. Faculty members in the School were involved in curriculum mapping, defining learning outcomes for all programs and competencies particularly for the professional MPH. Student input was sought through a survey of first year undergraduates, a survey of graduates from the Bachelor's program within their first year following graduation, a survey of current MSc and PhD students, and a survey of alumni from these same graduate programs.

The external review was undertaken by Dr. Robert Buckingham, Executive Director, School of Public Health, University of Saskatchewan, and Dr. John O'Neill, Dean, Faculty of Health Sciences, Simon Frasier University. The site visit occurred on March 6-7 2014. The internal reviewer was Dr. Siva Sivaththaman from the Department of Electrical and Computer Engineering.

The previous review of the MSc and PhD occurred in 2005/06 (the MPH has not been previously reviewed as it began only in 2006), and the previous review of the undergraduate program occurred in 2006. The original intention was to conduct the present review in 2012/13, but due both to the number of new programs introduced, and the change of Director, the process was delayed a year. However, the review occurred within the eight year maximum permitted by the Quality Council.

The previous undergraduate review from 2005/06 made 9 recommendations, briefly summarized as follows, along with the status of the response:

- Make the program goals more explicit (done)
- Undertake a comprehensive curriculum review (still in process)
- Provide increased emphasis on health promotion, the Canadian health care systems and global health (all three feature in the new Bachelor of Health Studies, and the new Bachelor of Health Promotion)
- Increase tenure track faculty numbers (rose from 15 in 2006 to 20 by 2013, with additional hires ongoing in 2013/14— although student numbers also rose)
- Increase the engagement of faculty in the undergraduate program (research buyouts by tenure stream faculty are replaced by faculty on limited-term appointments)
- Resolve issues of animal care on campus (done)
- Make the Department's position on biological science clear (new hires made in biological area)
- Encourage more interaction among first year students (initiatives such as the Living-Learning Community, tutorials in the core first-year courses, plus a new advising system)
- Re-constitute the Undergraduate Committee and improve the clarity of its role in governance (done)

The previous graduate review from 2005/06 made 3 main recommendations, also summarized below, along with status of the response:

- Engage a consultant to assist the Department in developing a vision and a plan for renewal of the biological stream (five new faculty were hired in biohealth and epidemiology)
- Hold a Departmental retreat to develop a strategic plan (led to the renaming of unit as a School, and associated with substantial new program development)
- Improve quality/quantity of student work space (still in progress: some new space may be available short-term as some research centres move to the north campus; in the longer run a new building is planned).

# Characteristics of the Programs Academic Programs Offered (covered in this review)

The BSc is offered in both regular and co-op format. There are 2 options, Health Informatics and Aging (an option has 6-8 courses). There are also 2 specializations (also 6-8 courses, open only to students with at least a 75% average), in Pre-Health Professions and in Health Research. Students can also choose Joint Honours in Health Studies and Psychology.

The BHP accepted its first students in fall 2013 and is not included in this review (but will be included in the next cycle).

# **Program Objectives**

The School's goal, as described in the 2011 Strategic Plan is "to advance learning, knowledge, practice and capacity in the fields of public health and health systems through strategic partnerships and excellence in teaching, research, and service".

The objectives of the BSc program are as follows:

- To provide a strong interdisciplinary approach to the study of the major determinants of health, and draws upon the behavioural, biological, social, and health sciences to build each student's understanding of contemporary problems in health promotion and disease prevention.
- To allow the student to acquire both the theoretical knowledge and analytic skills necessary to pursue challenging careers in health promotion or in many other health-related careers.
- To prepare students for post-graduate studies in population-based health promotion, clinical medicine and other allied health professions, biomedical research, and various health-related aspects of gerontology and care of the elderly.

The objective of the MSc program is as follows:

- To produce graduates with a sound interdisciplinary focus on health promotion and disease prevention, having fundamental knowledge and research capabilities on some important aspect of population health as defined by one or more of the five sub-fields offered in the MSc program.

The objective of the MPH program (from Program Handbook) is as follows:

 to prepare a new generation of public health professionals, skilled in protecting health, preventing illness, and helping people to achieve a healthier life for themselves and their communities in Canada and around the world

The objectives of the PhD program are as follows:

- To provide students with an advanced interdisciplinary focus, specialized training, and specialized research skills in population health promotion and disease prevention as defined by one or more of the five sub-fields offered in the PhD program
- To enable students to acquire depth of understanding and topical specialization to their graduate work through a research apprenticeship model and its application in institutional and community settings.

# **Specific Learning Outcomes**

The self study provides a summary of the learning objectives for the BSc, and maps them to the curriculum and the UDLEs; similarly the graduate learning objectives are mapped to the GDLEs.

### Significant strengths of program

### **Faculty**

At the time of completing the self-study, the School had 23 core faculty members, five members who held partial appointments with other departments (but their main appointment in the School), and five members with partial appointments in the School (but their main appointment elsewhere). Additional hires were in progress, including a senior appointment for the new Director (the search resulted in the appointment of Professor Craig Janes who took up the Directorship July 1 2014). There is also one continuing lecturer, and two long term lecturers. This does not include three associate research professors

associated with one of the research centres, and a research scientist. This represents significant growth from the 22 faculty at the time of the previous review.

Faculty members have won a significant number of internal university awards, and new investigator awards from a variety of agencies. More established faculty have been appointed as Fellows of the Canadian Academy of Health Sciences, the Canadian Evaluation Society, the Gerontological Society of America, the Royal Institute of Public Health (UK), the Royal Society of Public Health (UK), the Society of Biology (UK), the American College of Epidemiology, a 3-M national teaching award, and a variety of other awards from professional societies. Faculty members serve on a long list of Expert Panels, Advisory Boards, Working Committees, Committees and the like. Faculty members serve on the Editorial Boards or as Editors and Assistant/Associate Editors of 30 journals. The list of journals, agencies and funding bodies for which faculty members undertake reviews extends for five-and-a-half pages (single spaced, two columns per page).

# Staff/Administration

There are six staff who serve as the administrative support for the undergraduate programs (two individuals), the research graduate programs (one individual), the professional Master's program (two individuals) and to the Director (one individual). Other support is provided at the Faculty level for all three Departments/Schools, such as for recruitment, student services, finance, etc.

### Students

### Undergraduate

As of 2013, the School had around 500 undergraduate students enrolled across all years of the program. These are split fairly evenly between co-op and regular students. There is greater demand for the co-op stream (possibly because there are health studies programs at most other Ontario universities, but few which offer co-op). 95% of those in the co-op stream (as compared to 69% in the regular stream) had an entrance average of 80% or more; and 71% of those in co-op had 85% or more (as compared to 26% in the regular stream). These data are from the past 8 years, 2006-2013. Entering grades have been increasing over the period. The proportion of undergraduates on student visas is around 10%, and between 70 and 75% of undergraduates are women.

Attrition rates are relatively low. Close to 95% of first year co-op students continue on to second year, and close to 90% of regular students. 82% of those who start in first year in co-op continue on to graduate with the degree in Health Studies, as compared to 75% of regular students. 95% of co-op students are ranked as "very good", "excellent" or "outstanding" by their co-op employers. 94% of co-op students ranked their co-op employers between 7 and 10 (10 being the highest score). However, a significant number of co-op students choose to graduate from the regular program – one frequent reason being that they feel they have acquired sufficient work experience and do not choose to complete all the co-op terms required.

Post-graduation surveys since 2004 suggest that more than half of the graduates continue on to post-graduate education, and about a third gain professional employment. The proportion going on to additional education over the period has risen.

At the undergraduate level, the Department runs various initiatives designed to increase student support and the sense of community. These include a mentorship program (by upper year students, for first years); a living-learning community on campus; and an online mentorship program offered by AHS alumni.

# <u>Graduate</u>

The MPH program has experienced growing numbers of applications since it began in 2006. In 2012 the program had 368 applications, of which 92 were accepted. Over the lifetime of the program, about half of the students have been full-time (the program can be completed over two years), and the rest part-time (completing in four years). The MSc program accepts about 20 students per year, and the PhD about 10. About 7% of MSc students and about 13% of Doctoral students have been international, in the period since the last review, and about 10% of the MPH students. Women form a little over 80% of the Master's students on average, and a little less than 80% of the PhD students.

Median completion times for MPH students are around 3 years (reflecting the even split between full and part-time students who complete in 2 and 4 years respectively). The median time for completion for MSc students has been either 6 or 7 terms. For PhD students, the median and average has been around 5 years, with some tendency for completion times to lengthen more recently. Graduates from the research programs (MSc and PhD) averaged almost 2 journal publications, 1 refereed conference publication and one "other" publication each. They also presented their work at 1.6 conferences on average. Master's graduates go on to professional employment within the health sector (and a proportion proceeds on to doctoral studies). Doctoral graduates go on to faculty positions, as well as Director of Research-type positions in the health and social sectors.

In the graduate program initiatives to enrich the experience include participation in the end-of-year Research Presentation day held by the Faculty.

The large majority of full-time students in the research graduate programs receive support (those who are beyond time limits may not, or may only receive reduced funding). At the time of writing of the self study, funding was \$22,000 annually for the Master's students, and almost \$32,000 annually for the Doctoral students, for those funded. A small proportion of the MPH full-time students receive funding, typically from outside the university, although a larger proportion receive awards to defray expenses of the required practicum.

# Reviewers' Recommendations/Departmental response regarding program enhancements

The strengths and challenges as they relate to both the graduate and undergraduate offerings in the SPHHS were clearly articulated in the reviewers' report. In summary, the review team agreed that the SPHHS is a successful academic unit that has grown rapidly over the past through years through attracting high quality students to new undergraduate and graduate opportunities that are well-positioned to respond to important public concerns in the broad area of public health and health systems. The School has also attracted a strong faculty complement with high research success. However, this rapid growth has created some challenges and tensions, as noted in the reviewers' report. The reviewers also briefly outlined recommendations to address the following concerns, quoted almost verbatim below:

- 1. Space has become a significant issue for the School and new facilities are urgently needed to accommodate new faculty, an expanding graduate student body and research collaborations.
- 2. The reviewers recommend that the School work with the Dean and Provost's office to re-balance new hires to achieve a better complement of teaching faculty and faculty with practice experience in public health.
- 3. The apparent proliferation of new undergraduate and graduate degrees may exacerbate existing challenges of class size and range of courses offered without sufficient faculty support. The reviewers recommend the School consider offering streams, concentrations, certificates, etc. rather than distinctive degree designations.
- 4. Changes in the external supply and demand for training in public health in Canada may require substantial changes to the MPH program if it is to continue to meet enrollment targets with high quality students. The reviewers recommend the SPHHS monitor the external environment carefully and consider options such as accreditation if competition for students leads to a drop in student enrollment.
- 5. The rapid expansion of degrees and program requirements has resulted in a faculty complement spread too thin. The reviewers recommend that new hires be able to teach in the core areas of current degree programs rather than introducing new areas of teaching expertise.
- 6. The reviewers recommend that the MSc/PhD nomenclature be re-considered in order to attract high quality MSc/PhD students to the areas of faculty research expertise.
- 7. The reviewers recommend the School and Faculty Dean indicate a clear commitment to valuing undergrad education and populating lower division classes with senior faculty.
- 8. The reviewers recommend that the School and Faculty of Applied Science continue to work together to profile and strengthen the area of Aging and Health as an area of excellence across the Faculty, with core critical mass in the SPHHS.
- 9. The reviewers recommend that new leadership in the School focus on the challenges faced by new faculty and ensure that workload and governance reflect equity and collegiality. This will require a period of consolidation rather than continued rapid growth.
- 10. The reviewers recommend that the School and Dean encourage the formation of new "Research Centres" to provide infrastructure and administrative support to new faculty.
- 11. The reviewers recommend that staff workload be reviewed and new hires be made as necessary to ensure appropriate support across all programs.

The School provided a detailed response to the recommendations, which were found to be very constructive, which included three two-year plans for each of the groups of programs (BSc; graduate

research programs, and graduate professional programs). The response was held, awaiting the arrival of the new School Director as of July 1.

Unexpectedly, the AHS dean also resigned effective July 1. The incoming Interim Dean then discussed how to proceed with the new Director. Given the extent of leadership turnover, it was decided to focus initially on three key issues (relating to five of the eleven recommendations from the review), and to undertake to respond to these issues in the two year plan.

Two-Year Plan: Action steps	Who is responsible?	Who will provide resources?	Timeline
Hold faculty retreat and review School plan; report to SGRC September 2016; at that time report as to response to other recommendations	School Director	School Director	Retreat in 2014-15
Consolidate School offices into one location within AHS building (recommendation 1 – space) and consider longer term plan for more space	School Director with Dean	Dean	8-12 months
Examine workload such that senior faculty have more opportunity to teach undergraduates (Recommendation 7)	School Director	Not clear resources required	12 months
Revise faculty hiring plan: will also aid in consolidation of strengths rather than being spread thin; and provision of appropriate supervision for graduate students.  (Recommendations 2, 5, 9)	School Director	Dean/Provost	12-24 months