MEMORIAL UNIVERSITY OF NEWFOUNDLAND

ACADEMIC PROGRAM REVIEW

GRADUATE STUDIES, FACULTY OF MEDICINE

SELF-STUDY REPORT

Submitted October 27, 2006

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SYNOPSIS

This self-study report confirms that graduate degree programs in the Faculty of Medicine are strong and growing, with satisfaction expressed among students and faculty about their administration and funding.

The report examined graduate degree programs in Medicine over the past 10 to 15 years based on the following documentation: previous reports; descriptions of administrative structure, academic units and faculty; quantitative information about students such as enrolment and graduation rates, characteristics by gender and nationality, and time to degree completion. For information on strengths and weaknesses of current practice, the self-study included qualitative information from more than three dozen people representing administrators, faculty, and students.

The quantitative aspect of the self-study reveals the substantial growth in graduate programs over the past 15 years: from 56 to over 190 students. It also shows the shift in gender and nationality over this time from male to female students and from international to Canadian students, and the growth in numbers of non-bench science students.

Issues identified in feedback, however, focus on space, increasing funds for students, modifying procedures for admissions, and improving communications and profile within Memorial University.

Generalizations from these two approaches to the self-study–quantitative and qualitative–are itemized below as strengths and areas for improvement.

Strengths of Graduate Studies in Medicine

1. Graduate programs in Medicine are on solid academic grounds as evidenced by the following:

   a) significant growth during the past 15 years (more than three-fold increase in enrolment);
   b) program satisfaction as expressed by students and faculty;
   c) quality of students attracted into various programs;
   d) increase in the development of new programs (two-fold increase in number of programs offered since the 1993 Report);
   e) favorable program completion success rates and success of graduates from various programs.

2. Students, faculty administration and participating faculty expressed overwhelming satisfaction with the administrative support provided by the Office of Research and Graduate Studies (Medicine).

3. Students, faculty administration and participating faculty identified a good rapport between students and faculty, likely due to the relatively small size of the Faculty of Medicine both in terms of the number of people and the size of the physical structure.

4. Students and faculty gave positive feedback about student stipend support provided through faculty research grants, matching funds provided by the Office of Research and Graduate Studies (Medicine), and the School of Graduate Studies.

Areas for Improvement in Graduate Studies in Medicine

1. Despite general satisfaction with funding support for students, several issues need addressing:

   a) larger student stipends are required to make Memorial competitive with other institutions;
   b) travel support funds for students, which are necessary for their development as researchers, must be increased;
   c) the policy regarding funding for full-time graduate students needs review for applicants who are able to conduct research without the support of a supervisor's research funds;
   d) a concern exists over perceived inequities with respect to financial support received from the School of Graduate Studies by the Faculty of Medicine;
   e) considerable dissatisfaction exists with what is perceived as an unreasonable policy by the School of Graduate Studies concerning funding eligibility and length of program limitations (i.e., 4-year period for PhD completion and 2-year period for MSc completion).

2. The growth potential for graduate studies is severely limited by lack of space. Both laboratory space and office space are already under maximum utilization for students currently enrolled.

3. Improvement in the maintenance of the Research and Graduate Studies Web site is essential for both recruitment of new students and information to faculty and students in existing programs. A major issue expressed by students was that while administrative staff were quite proficient, students were often uninformed about the administrative services available to them.

4. Policies and procedures need review and revision for appointing graduate supervisors, for expediting admissions, and for implementing related recommendations in the 1993 Report.

5. The Faculty should consider an annual report on the graduate program be made to Faculty Council by the Associate Dean of Research and Graduate Studies.

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ACADEMIC PROGRAM REVIEW

REPORT ON GRADUATE STUDIES, FACULTY OF MEDICINE

INTRODUCTION

Self-Study Background

Under the authority of the university's Senate, the review of academic units and programs aims to support the objectives of the university as outlined in the procedures published at *http://www.mun.ca/vpacademic/unit_program_review.php*. This Academic Program Review (APR) was initiated by the Vice-President (Academic) to evaluate only the graduate programs in the Faculty of Medicine (*http://www.mun.ca/vpacademic/all_units_timelines.pdf*). It follows upon a written request for review about three years ago by the current Associate Dean for Research and Graduate Studies in the Faculty of Medicine, Dr. Penny Moody-Corbett. This particular APR thus does not adopt the conventional format followed by other academic units at Memorial University, which combine undergraduate and graduate programs of a single academic unit in one self-study report.[1]

At an information session on February 6, 2006, the Vice-President (Academic), Dr. Eddy Campbell, introduced the review process to the Dean's Advisory Committee on Graduate Studies in Medicine along with a few other members of faculty. He acknowledged that the timing of this review had been moved forward by the accreditation process under way for the undergraduate medical curriculum; however, as stated in the APR procedures and subsequently confirmed by Dr. Campbell to the self-study committee chair by e-mail, the APR is not formally related to accreditation or other mandated reviews. At the information session, Dr. Campbell also explained that the dean of record for this particular APR is the Dean of the School of Graduate Studies, Dr. Chet Jablonski.

The Dean of the Faculty of Medicine, Dr. James Rourke, then appointed a committee representing the range of graduate studies in the faculty: one representative for each division of Basic Medical Sciences, Clinical Disciplines, and Community Health and Humanities; and one graduate student each for bench science and non-bench science programs. Members for these areas are Dr. Chet Michalski, Professor, Basic Medical Sciences; Dr. Jennifer Connor, Associate Professor, Community Health and Humanities; Dr. Michael Woods, Assistant Professor, Discipline of Genetics; Sonya MacParland, PhD student in Immunology and Infectious Diseases; and Montgomery Keough, MSc student in Clinical Epidemiology. The committee thus represents a cross-section of constituencies, including two recent faculty appointments and one former assistant dean of both Research and Graduate Studies in Medicine and School of Graduate Studies. On May 26, the self-study committee had its first meeting. Dr. Moody-Corbett outlined procedural issues, including the dean of record for this review, the deadline of October 1 for the self-study report, and the eventual assessment of our graduate studies within the context of faculties of medicine across Canada; she also charged the committee with selecting a chair and making suggestions for external reviewers. The committee then met bi-weekly through the summer, with other meetings outlined in the report methods section below.

[1] Reports of completed academic unit APRs are available on a confidential Web site at *http://www.mun.ca/vpacademic/academic_review_reports.php*.

Scope of Self-Study

In keeping with the purposes for the self-study outlined in the APR procedures, this report aims to do the following:

1. describe graduate studies in the Faculty of Medicine (programs, organization, administration, and general resources);
2. describe plans or proposed innovations for graduate studies in the Faculty of Medicine.

Assessment of these features, and the contribution of the graduate programs to their respective academic disciplines, the University, and the province, is suggested throughout this report through descriptions of graduate students in Medicine and their quantitative profile; a summary of issues and concerns elicited from a cross-section of faculty, students, and administration involved in graduate studies in Medicine (accounting for about 40-50 people); and selected newsworthy items (such as research chair appointments).

The report also refers to substantial print material collected and deposited in the Office of Research and Graduate Studies for examination as part of this Academic Program Review (faculty CVs, course outlines, annual reports, student handbooks).

Summary of Previous Reviews

The Faculty of Medicine at Memorial University began in 1967. Following growth in the graduate programs, the first review of graduate studies was an in-house study in 1987 initiated by the Assistant Dean of Research and Graduate Studies in Medicine. The development and maintenance of graduate studies in the Faculty of Medicine during the past 20 years has been influenced to a significant degree by the report and recommendations of this 1987 Task Force to Evaluate Graduate Studies in the Faculty of Medicine (copy available in the RGS office). Major recommendations included the development of structured programs of study based upon the critical mass of actively engaged research faculty, the establishment of uniform academic elements for all programs of study and the provisions for administrative support structures at both the program and faculty levels to ensure that all aspects of graduate studies were adequately covered. Consequently, graduate programs in molecular biology, neuroscience, immunology, and community medicine were established, each electing a program coordinator to assist in the local administration of the individual programs. Overall responsibility for graduate studies in the Faculty of Medicine remained within the Office of Research and Graduate Studies (Medicine) under the Assistant Dean. A Dean's Advisory Committee for Graduate Studies (Medicine) consisting of the Dean of Medicine, the Assistant Dean for Research and Graduate Studies, the program coordinators, Associate Dean of Basic Medical Science, Associate Dean for Clinical Affairs, Associate Dean for Community Medicine, and graduate student representatives, continued to assist in the development of academic and administrative policies governing graduate studies in the Faculty of Medicine.

In 1993, a Committee to Review Graduate Programs in the Faculty of Medicine was established by the Dean of Graduate Studies. The general terms of reference for this committee were to examine and assess the current graduate program in Medicine, including program regulations and quality of supervision; to assess the facilities; and to provide appropriate recommendations for future development. Committee members were external to the Faculty of Medicine, without the first step of a self-study report by the graduate faculty themselves. The Report of the Committee Appointed by the Dean of Graduate Studies to Review Graduate Programmes in the Faculty of Medicine was positive in its overall assessment of the graduate program offerings in Medicine, and a series of recommendations to further enhance program offerings and support were offered (copy available in the RGS office). These recommendations included suggestions to enhance funding, student recruitment, program promotion, communication and academics. Three recommendations (4, 6, 7) regarding student supervision have remained an ongoing issue, however. No formal mechanism has been set in place other than review of faculty and their approval for supervisor status being handled by the Associate Dean, Research and Graduate Studies. None of the processes or terms of reference for program coordinators has yet been written down.

This second review in 1993 formed the basis for some of the approach and questions developed for pursuing this current self-study report, as outlined below.

Methods for Self-Study

To review the development of graduate studies in Medicine over the past 10 to 15 years, this self-study pursued three main approaches:

1. gathering existing documentation such as previous reports and descriptions of administrative structure, academic units and faculty, along with summarization of this textual material.
2. gathering quantitative information about students such as enrolment and graduation rates, characteristics by gender and nationality, and time to degree completion, along with a brief analysis of the graphic materials developed for the report.
3. gathering qualitative information about strengths and weaknesses of graduate studies from more than three dozen people representing administrators, faculty, and students.

Although faculty in Medicine have a physical base in the Health Sciences Centre, they are widespread in terms of the nature, location and schedule of their work (on- and off-campus). This fact, combined with a concern expressed in the 1993 Report about lack of adequate consultation for review, meant that for this report the self-study committee attempted to engage as many people as possible. Specific steps for achieving this aim and for undertaking the self-study are outlined below.

Meetings

Once the self-study committee had been formed, a person to fulfill the role of 'chair' was nominated and agreed upon (Dr. Jennifer Connor). Bi-weekly meetings of the self-study committee occurred from May 2006 until August 2006, combined with e-mail communications and informal meetings among individual members as needed. These meetings also served to share experiential information among

committee members from across constituencies in the Faculty of Medicine. Meetings were extended into October to accommodate the circulation of the report to the graduate studies advisory committee and then to finalize the report for submission.

Survey Instrument

A questionnaire was developed by the committee to be used with all the sample groups–faculty members, program coordinators, associate deans, and graduate students–and was based primarily on the 1993 report. The questions were open-ended and general in nature and as such, captured comments as they related to program concerns. However, comments regarding concerns applicable to the teaching approach in all graduate courses were also welcomed.

Sampling Methodology

Faculty members, program coordinators, associate deans, and graduate students were all contacted during the review process. Faculty members, program coordinators, and associate deans were sent a copy of the questions for their perusal prior to meeting with the members on the committee. They were also encouraged to contact the committee at any time during the review process to address any additional concerns.

Program Coordinators

Committee faculty members divided up the responsibility of meeting with the eight program coordinators based on their respective faculty affiliation. Faculty members on the committee initiated contact with the respective program coordinators and made arrangements to meet individually with them, along with one Discipline chair (Genetics). Committee members took extensive notes of their interviews with coordinators for direct inclusion in the self-study report.

Associate Dean, Research and Graduate Studies

Once the self-study committee had been convened, the Associate Dean, Research and Graduate Studies (RGS), Dr. Penny Moody-Corbett, was invited to meet separately with the whole committee on three occasions:

- to discuss changes and implementation of recommendations since the 1993 Report;
- to present information about the administrative structure of the RGS office and function;
- to seek feedback on any matters remaining before final submission of the report.

As well, Dr. Moody-Corbett was invited to submit her written responses to the questions posed in the general questionnaire used to guide interviews. Throughout the self-study process, the committee chair met informally with the Associate Dean, RGS to address specific issues and questions as they arose.

Associate Deans, Divisions

The two associate deans responsible for the divisions of Basic Medical Sciences and Community Health and Humanities were each invited to meet separately for about 30 minutes with the entire committee to answer the questionnaire and discuss any additional comments/concerns they may have. These associate deans were also invited to submit written responses to the questionnaire if they so chose.

Faculty Members
Faculty members in Medicine, who do not have a single departmental location, were informed about the APR in several ways. First, at the committee's request the Associate Dean, RGS e-mailed an announcement of the self-study committee to all faculty (a large group of a couple of hundred in the listserv), along with a request for submission of CVs. Reminders were e-mailed to groups of faculty throughout the summer. It was impractical to meet with all faculty members individually; therefore, the committee decided to invite all faculty members to attend an informational session to outline the APR process and receive their input. An e-mail was sent to all faculty, via the RGS office listserv, two weeks in advance. A repeating message was also placed on the Health Sciences Information Tele-prompter service–a standard method of communicating throughout the Faculty of Medicine and hospital. In the invitational e-mail, the committee also welcomed individual feedback by contacting faculty representatives on the self-study committee, by contacting the program coordinator responsible for their particular graduate program, and by meeting with the self-study committee, arranged through the RGS office or the committee chair. The committee chair later followed up with associate deans to request faculty CVs, annual reports, course outlines, and print versions of materials available on the Web site. The chair also reported on the APR to faculty meetings and retreat in the Division of Community Health and Humanities, eliciting further face-to-face and e-mail feedback.

Graduate Students
A copy of the questionnaire was sent to all graduate students via e-mail, and to the president of the student's society, MGSS. Students were given two ways to submit their completed questionnaires:
1. via e-mail to the graduate student representatives on the committee
2. via mail to the Office of Research and Graduate Studies

Anonymity was assured by removing any identifying information that may have been on the completed questionnaire. While students were asked to identify the program in which they were enrolled, this information was used for descriptive purposes only. A reminder e-mail was also sent to all graduate students. Lastly, copies of the questionnaire were made available at the Office of Graduate Studies, Faculty of Medicine which graduate students were encouraged to take and complete.

Staff
Committee members also met often with RGS and other graduate program staff to gather quantitative information and informally learn about procedures for graduate studies.

Confidentiality
By the nature of the positions, confidentiality for program coordinators and associate deans could not be guaranteed. Graduate students and individual faculty members were informed that their responses would be compiled in aggregate form and thus, no identifying information would be made available.

Report Definitions and Structure

1. The word *program* in this report differs from that understood in the university's APR procedures, which implies either 'undergraduate' and 'graduate' programs, or hierarchical distinctions within

these two generic programs such as 'diploma,' 'certificate, and 'Bachelor's' level programs or 'Master's' and 'doctoral' level programs.

In the Faculty of Medicine, *program* refers to the overall graduate student unit administered through the Office of Research and Graduate Studies. It can also refer to areas of graduate concentration. These areas themselves represent distinct academic models: the biomedical for the science programs; and the social science model for the community health programs (with a humanities model for potential new programs). The degree programs differ accordingly, with orientations toward clinical and/or professional studies depending on program. To simplify the presentation of student enrolments and related aspects of graduate studies in Medicine, this report therefore refers occasionally to 'bench science' and 'non-bench science' programs and students.

2. For this report, other shortened terms are used. Unless otherwise specified,
   - 'Medicine' refers to the Faculty of Medicine at Memorial University of Newfoundland;
   - 'BMS' refers to the Division of Basic Medical Sciences;
   - 'CHH' refers to the Division of Community Health and Humanities;
   - 'RGS' refers to the Office of Research and Graduate Studies, Medicine;
   - 'SGS' refers to the School of Graduate Studies;
   - 'Associate Dean, RGS' refers to the Associate Dean of Research and Graduate Studies, Medicine;
   - MSc refers to the Master of Science in Medicine degree;
   - ARTC refers to the Atlantic Regional Training Centre that operates a joint-university Applied Health Services Research Master's degree program;
   - 'students' refer to both full-time and part-time students.

3. Owing to the distinct investigative approaches taken to this self-study, this report is divided into two main parts: Part I describes the administrative and academic structure for graduate studies in Medicine, along with a detailed presentation of descriptive statistics on the graduate student population over the past 10 years; Part II summarizes feedback received from administrators, students, and other faculty.

PART I:
DESCRIPTION OF ADMINISTRATIVE AND ACADEMIC STRUCTURE

1. ADMINISTRATIVE STRUCTURE

The mission statement of the Faculty of Medicine, re-affirmed in November 2002, identifies conducting research in clinical and basic medical sciences and applied health sciences as its second method of enhancing the health of the people of Newfoundland and Labrador (after educating physicians and health scientists) (for more information, see *http://www.med.mun.ca/MED/medATmun1/aboutUs.htm*). Elaborating on this goal is the statement that the Faculty 'desires a future research structure of increased multi-disciplinary approaches and enhanced collaboration, coordination and resource sharing.'

When it was founded in 1967, the Faculty of Medicine at Memorial University was organized as a non-departmentalized academic unit to facilitate collaboration across three broad areas: clinical, basic science, and community medicine. The Faculty has retained that administrative structure to the present, with a cluster of Clinical Disciplines currently having no coordinating administrator (i.e., associate dean) but individual chairs, and two academic divisions, each with its own Associate Dean: Division of Basic Medical Sciences; Division of Community Health and Humanities. The Office of Research and Graduate Studies, with an Associate Dean, operates across these three areas by overseeing all their research and graduate studies activities.

Under the administrative structure of Memorial University, this organization of the Faculty of Medicine thus assigns extensive responsibility to the Dean as 'Head' of an academic unit. However, in distinction to other associate deans, the associate deans of the two Divisions operate functionally, along with division heads at Grenfell College and department heads at the constituent university, to have direct faculty reports (see *http://www.mun.ca/vpacademic/Policies_for_Appointment.pdf*). In these ways, the Faculty of Medicine at Memorial is unlike other medical faculties that have departmentalized structures to handle routine academic issues (including those covered by the faculty association, MUNFA). Over the last year, the Faculty has increased the number of associate dean titles to four by renaming the Assistant Dean, RGS to the Associate Dean, RGS, and establishing a new position for clinical research (see *http://www.med.mun.ca/munmed/172/research_dean.htm*).

For the purposes of graduate studies, active researchers thus transcend a conventional departmental organizational structure. Eight graduate programs are intended to draw upon faculty expertise across the Faculty of Medicine: Human Genetics; Cancer Research; Cardiovascular and Renal Sciences; Immunology and Infectious Diseases; Neuroscience; Clinical Epidemiology; Community Health and Humanities; and Applied Health Services Research. An elected faculty Program Coordinator represents each graduate program and provides administrative support at the program level and serves on the

Graduate Studies Advisory Committee of the Faculty of Medicine. Although treated as a cohesive unit by administrators at Memorial, faculty reflect as much disciplinary diversity in Medicine as found across a university. Nevertheless, with the exception of two in the Clinical Disciplines (Human Genetics and Clinical Epidemiology), graduate programs fall primarily under the auspices of the two Divisions: four in Basic Medical Sciences; two in Community Health and Humanities.

Sections 1.1 to 1.2 describe in more detail the administrative areas responsible for overseeing graduate studies in Medicine; sections 2.1 to 2.3 then describe the academic structure of units and faculty responsible for graduate teaching, course content and delivery in Medicine.

1.1 Office of Research and Graduate Studies

The Office of Research and Graduate Studies (RGS) consists of the Associate Dean of Research and Graduate Studies and four staff members. The RGS office is also the administrative unit that provides information and services about research for the Faculty of Medicine. Much activity is therefore devoted to grant application submissions, contract approvals, research accounts, ethics approvals, and so on, as the Associate Dean is the signing authority for all research-related and graduate program-related activities in Medicine. The research aspect of the RGS function is beyond the scope of this self-study. However, information is available on the RGS Web site (*http://www.med.mun.ca/graduate/default.htm*), and in the first research report for Medicine, which appeared in 2004 and highlighted the dramatic growth in research funding handled by RGS (*http://www.med.mun.ca/MED/research4/ResearchReport/intro.htm*). This report also sketched the graduate studies enterprise in Medicine.

With this dual, but related, function, the Associate Dean reports to both the Dean of Medicine and the Dean of Graduate Studies. The current incumbent, Dr. Penny Moody-Corbett, recently had her appointment officially renewed, after a lapse of about one year since her last official appointment, at a higher rank (formerly, the position was Assistant Dean). As outlined in the Terms of Reference for the position (available in the RGS office), the Associate Dean

- oversees all aspects of graduate studies in the faculty including admissions; course changes; program development; oversight of budget; allocation of funding for student stipends, awards, travel funds, and the visiting speakers program; thesis submission; grade submission, etc.
- attends all comprehensive examinations as the chair and voting member and all PhD oral defences
- regularly attends Faculty Council and the Resource Management Committee to report on graduate studies, and to present courses or programs for consideration and approval by Faculty Council
- chairs the Dean's Advisory Committee on Graduate Studies
- represents the Faculty, along with one other member of faculty, on the School of Graduate Studies Academic Council
- represents the Faculty nationally on the AFMC research and graduate studies committee and corresponds regularly with CIHR on policies related to graduate studies

The final responsibility for graduate studies at Memorial University ultimately resides with the Dean of the School of Graduate Studies (SGS), who admits students to graduate programs in Medicine after they have applied to SGS. Information about this process is provided on the RGS Web site, and in the new *Handbook* (Appendix 1), along with links to SGS for students to apply online (*http://www.mun.ca/sgs*).

The RGS office has four staff, each with distinct areas of responsibility including enquiries, admission, registration, fees and funding, awards, maintaining databases, information distribution, course listings, thesis submission and arrangements for thesis defence and comprehensive examination.

The Dean's Advisory Committee on Graduate Studies has evolved over the past couple of decades to include all the program coordinators, two Associate Deans for the two Divisions, a graduate student representative, and the Associate Dean (RGS), who is also the chair. The committee meets on a monthly basis to discuss policy and procedural issues, vote and make recommendation on new courses or changes to areas of concentration, funding, admissions, and review all applications to graduate studies in Medicine. The committee also reviews all applications for internal fellowships. In addition to support for eight program coordinators provided by the RGS office, staff support for coordinators varies with the academic 'home' for each: part-time staff is being sought for the Clinical Epidemiology program, and CHH has one full-time staff member for its graduate programs.

All eight program coordinators make a recommendation to the Associate Dean, RGS to accept an applicant into any of the graduate programs in Medicine. The current policy specifies that graduate students must first be accepted by a supervisor to enter a program. Significant emphasis in the decision-making process is therefore placed on the availability of a supervisor: according to the RGS Web site, applicants without one will not be accepted, and the Associate Dean notifies the School of Graduate Studies that their files be closed (*http://www.med.mun.ca/graduate/pages/information.htm*). Applications approved by program coordinators and the Associate Dean, RGS are forwarded to the Dean of Graduate Studies. Accepted students have their supervisors and supervisory committees approved by the Dean of Graduate Studies. The School of Graduate Studies sends an acceptance letter to the applicant, outlining procedures to follow and informing about the required completion of the Graduate Research Integrity Programme (GRIP) (see section 1.2). This letter is copied to the Head of the Academic Unit (i.e., Associate Dean, RGS), and the student's supervisory committee.

The School of Graduate Studies approves most activities associated with graduate work through its own academic infrastructure. An Academic Council of appointed members develops such policies and procedures as 'Responsibilities of Supervisors and Graduate Students,' a document included in the student's acceptance letter (and approved by the SGS Council in June 2000). Once a new graduate course is recommended by graduate program coordinators, and voted on by Faculty Council in Medicine, it is submitted to SGS for approval. The RGS Associate Dean is a member of this Academic Council, along with Dr. Richard Audas from CHH.

1.2 Graduate Programs in Medicine

Subject Areas

After the 1987 report, the Faculty of Medicine adopted four areas of concentration for graduate studies: Molecular Biology; Neuroscience; Immunology; and Community Medicine. In the 1993 report, the committee found that 'this reorganization constituted a very considerable advance on the earlier less structured program and that it had successfully imparted a sense of direction and clear focus to the program as well as improving the supervisory back-up in the areas to which graduate students were admitted' (p. 7-8). It was also felt among faculty in 1993 that the 'interdisciplinary' character of these areas was preferable to the 'more traditional organization by departments' (p. 8). At the time, a fifth area of concentration, Cardiovascular and Renal Research, was being considered.

The number of areas of concentration has doubled in the intervening 13 years. As well, the nature of degrees offered in these new programs has changed, from 'area of concentration' in a laboratory-based science degree to subject areas involving different intellectual approaches and methodologies of distinct disciplines: the original biomedical model in graduate programs in Medicine has thus been complemented by an emphasis on health and its social determinants. The MSc degree continues to be offered in all eight areas, but effective 2005, it was clarified to Master of Science in Medicine. The PhD degree is offered in all but the Applied Health Services Research program. The graduate diploma is offered only in two programs: CHH and Clinical Epidemiology.

In general, Community Health and Applied Health Services Research graduate students are associated with faculty in the Division of Community Health and Humanities; Cancer Research, Cardiovascular and Renal Sciences, Immunology and Infectious Diseases, and Neuroscience graduate students are associated with the Division of Basic Medical Sciences; and Clinical Epidemiology and Human Genetics are associated with the Clinical Disciplines. However, some faculty participate in programs outside their immediate academic affiliations.

Policies and Procedures

The graduate degree programs in Medicine are approved for offering through the School of Graduate Studies at Memorial University. Briefly, graduate students must first be accepted by a supervisor to enter a program. A supervisory committee composed of the supervisor(s) and two other faculty members is approved by the Dean of SGS, on the recommendation of the Associate Dean, RGS. This committee meets at least once a year and is responsible for monitoring student progress, suggesting any necessary changes to the program, recommending progression to the comprehensive examination, reading the thesis, and recommending that the thesis be sent for examination (*http://www.med.mun.ca/graduate/pages/super_committee.htm*). While each program may differ slightly, graduate students are expected to take at least two courses as outlined by the program coordinators. Generally, program-specific seminar series or journal clubs are attended on a weekly basis, with students (and in some programs, faculty) participating as presenters.

Full information about policies and procedures for graduate studies is provided in the *Handbook for Graduate Studies in the Faculty of Medicine* (Sept. 2006) (Appendix 1). For students, this *Handbook* outlines the processes that reflect conventional practices in graduate studies, along with details about financial

information and funding support available. Only changes in general program requirements and course delivery will be described below.

Program Requirements and Course Delivery

Changes in degree requirements at Memorial University have sometimes been mandated by external agencies. In response to the Tri-Council Policy Statement on Integrity in Research and Scholarship, SGS developed the Graduate Research Integrity Program (GRIP), which is required as a course by all graduate students at Memorial University after 2002 (*http://www.mun.ca/sgs/grip*); the course is noted on their transcript. Based on case studies, the course broadens the concept of research ethics to five areas: 1. Graduate Student-Faculty Relationship; 2. Sensitivity to Human Subjects; 3. Sensitivity to Animals and the Environment; 4. Ownership and Acknowledgement; 5. Data Collection, Storage, and Access. The Associate Dean, RGS provided advice on the case studies, and teaches in the GRIP program. A *Self-Study Component Manual*, revised in 2004, is available in the RGS office. In addition to GRIP, students using experimental animals or the human population must complete the Animal Care seminar and TCPS online tutorial, respectively.

Delivery of graduate courses has changed in Medicine with the introduction of Web- and other distance-based learning in Community Health and Humanities. Course numbers and their descriptions are available both in the University's *Calendar*, and on individual Web sites for each graduate program in Medicine (although uneven with respect to detail on the Web). All courses are required by SGS to have a full description including method of evaluation, course outline, readings, and list of instructors. Copies of some recent syllabi, gathered for this self-study process, are available in the RGS office.

Graduate courses offered in the past four years are listed in Appendix 2. There is some variation in course enrolment; however, most enrolments are relatively small (fewer than 10 students per course). A few courses may be offered as special topics for individual students. In general, course enrolments are larger in Clinical Epidemiology and CHH courses than in other programs (up to 20-25 students). The larger class size is most noticeable in an introductory course in biostatistics (MED 6200), offered by CHH, which is in high demand.

There is no course evaluation provided for graduate courses at Memorial; hence, faculty are not routinely evaluated for their teaching. The administration of course evaluation questionnaires (CEQs) was implemented for undergraduate teaching only in 2001, through the Centre for Institutional Analysis and Planning (*http://www.mun.ca/ceq/*). The procedures specify that course evaluations will not apply to small enrolment classes or to team-taught or modularized courses; if a course instructor/supervisor wishes to develop and administer an alternative course evaluation, a Senate committee (Committee on Course Evaluations) has to approve it first. Informal course evaluations have been used in some graduate courses in Medicine (notably in the CHH program). The Associate Dean, RGS has written to the Dean of SGS for input on how to evaluate graduate courses and what can be used when the format differs (seminar, lab, etc.).

Funding

Several different sources of funding are available to graduate students in Medicine, including a baseline allocation from the SGS, funds from the Faculty of Medicine, external funding and supervisors' grants.

The Administrative Staff Specialist II in the RGS office oversees the debiting of accounts to cover financial support for all the graduate students. The Faculty has a policy that all full-time graduate students receive a minimum stipend of $12,000. The diploma students (who are part time) are not eligible to receive financial support. Approximately two-thirds of the MSc and PhD students receive financial awards or funding. Students are encouraged to apply for funding and as recognition of their academic achievement, SGS offers a $3,000 a year top-up to students who secure funding from one of the tri-council agencies (CIHR, NSERC, SSHRC). Both internally and on a national scale, all funding offers require competitions in which grades and research potential are evaluated. Information on financial assistance is outlined on the RGS Web site and in the *Handbook*.

Graduate students are encouraged to present their research at national and international meetings. A small travel stipend (usually $400) is made available for MSc students once in their program and for PhD students twice in their program. The funds are available for both part-time and full-time students. In addition, students have been able to apply for travel support from the SGS and the Graduate Student Union, although funds available for graduate travel from SGS have been discontinued (2005). Students in CHH programs are also able to apply for the Barrowman Community Health Travel Award, valued at $500, which is a competitive prize. Graduate students in Medicine participate in the annual CIHR National Poster Competition held in Winnipeg and receive a travel stipend to attend this meeting. Students also apply for and receive funding from a variety of agencies for travel to meetings.

One source of support that is not available for international students is health insurance: as discussed in the Graduate Students Union *Handbook* (p. 42), because this province does not provide coverage, these students often incur greater expenses than others in purchasing private health care insurance.

Awards and Honours

The Faculty of Medicine provides two annual academic prizes: one at the MSc level, the Burness Award, and the other at the PhD level, the Colman Award. These are valued at $1,000 and are open to students in all areas of study. The program coordinators are responsible to review and select the winners of these prizes. In addition, several of the graduate programs have their own awards for research presentations over the course of the year; for example, the Immunology and Infectious Diseases program has the Tsaltas awards, the Cancer program has the Mary Pater award, and the Neuroscience program has the Golden Synapse award.

Graduate students in Medicine are nominated for prizes and awards associated with both the spring and fall convocation, including the Governor General's Medal for the best overall PhD thesis, the Medal for Excellence in a thesis-based Master's program, and the designation of the Fellow of the School of Graduate Studies. Within the Faculty of Medicine prizes are also available annually for each of the eight programs, awarded based on criteria established by each program; the value of these awards varies.

The Faculty of Medicine hosts an annual awards ceremony at which graduate students receive their awards.

Communication and Information Distribution
The Associate Dean, RGS annually meets with each of the graduate program areas to give an overview of the eight programs in Medicine. This presentation is attended by students. Faculty members are welcome, but faculty attendance varies depending on the program. The Associate Dean along with program coordinators have an annual open house for undergraduate students from across Memorial to learn about graduate programs in Medicine; this event is well attended and creates an opportunity for student placements through summer employment, honours programs and MUCEPs (Memorial Undergraduate Career Experience Program) in addition to the information provided on graduate studies.

The RGS office maintains a Web site (*http://www.med.mun.ca/graduate/*) that describes current activities and provides details about such topics as funding, deadlines, and fees, along with program links. As well, RGS recently prepared a printed *Handbook for Graduate Studies in the Faculty of Medicine* for this latter information (Appendix 1).

The SGS has a Web site that outlines policies and procedures in the School of Graduate Studies and also provides a link to the University *Calendar*. All forms relating to the graduate programs can be found on this site.

2. ACADEMIC STRUCTURE: UNITS AND FACULTY

The complement of full-time faculty in Medicine currently comprises about 200, with most being clinical appointments (about 130). Approximately 80 faculty members are involved in some aspect of graduate studies, whether in teaching or in their role as supervisors, members of supervisory committees, thesis examiners, or members of comprehensive examination committees. A list of these faculty is available in the RGS office. The Associate Dean, RGS discusses supervisors' responsibilities with them and advises new faculty on the preference for co-supervision with a more experienced supervisor. Final approval of supervisors is made by the Dean of SGS, who also approves appointments to committees.

Most faculty who supervise graduate students are full-time members of Clinical Disciplines and the two divisions, BMS and CHH. As discussed more fully below, the number of faculty has grown rapidly in recent years, with many more available for graduate supervision than twenty years ago (although the numbers are only now being brought back to earlier levels in some areas).

2.1 Division of Basic Medical Sciences

The Division of Basic Medical Sciences (BMS) was a founding division of the Faculty of Medicine in 1967. A proposed change of name to the more widely recognized Biomedical Sciences has now passed from the Faculty of Medicine (approved by its council) to the university's Senate for approval.

At present, the Division consists of 32 faculty: 26 are full-time, and 6 have joint appointments. Six of the joint appointments are held with Clinical Disciplines in the Faculty of Medicine; 5 of these consider

BMS as their 'home' appointment and the other considers the Discipline of Genetics as the home appointment. There is also a Professor Emeritus who continues to conduct research in collaboration with BMS faculty members. In addition, there are a number of cross-appointed faculty, five from the Faculty of Science, two from Clinical Disciplines, and one from the School of Pharmacy. In terms of distribution of academic positions, there are 19 full professors, 8 associate professors (all tenured), and 5 assistant professors (tenure-track). The Division has also undergone a successful round of recruitment. Five new faculty members will be joining the Division in the spring/summer of 2007. These include two faculty who will join the Cardiovascular and Renal Physiology research group; two who will join Immunology and Infectious Diseases; and one who will be part of the Neuroscience group.

The majority of the faculty in the Division are members of four research groups, which include Cancer Research, Cardiovascular and Renal Physiology, Immunology and Infectious Diseases, and Neuroscience. In addition, there are a number of faculty members who do not easily fit into these research groups. A full listing of faculty members and links to their research pages can be found on the BMS Web site (*http://www.med.mun.ca/basic*).

The Division is administered by an Associate Dean (Dr. Karen Mearow). In addition, an administrative staff of 3 provides secretarial support. The Division holds monthly meetings to discuss any items of concern to faculty, including graduate and undergraduate education, administrative issues, etc., and it produces an annual report.

Four of the graduate programs in the Faculty of Medicine reflect the research strengths within the Division. Thus, BMS faculty members are also members of the graduate programs of Cancer, Cardiovascular and Renal Physiology, Immunology and Infectious Diseases, and Neuroscience. Faculty members thus supervise graduate students on scientific research projects in their areas of interest. These projects are generally funded by external operating awards from national and international granting agencies such as the Canadian Institutes of Health Research (CIHR), the National Science and Engineering Research Council of Canada (NSERC), the Heart and Stroke Foundation, the Breast Cancer Society of Canada, the Banting Research Foundation, the National Research Council of Canada, and the National Institutes of Health (NIH). In addition, 9 Canada Foundation for Innovation grants have been awarded and 6 CIHR New Investigator Awards are currently held by a number of full-time faculty in the Division. BMS has also been successful in obtaining two Canada Research Chairs (CRC) (Tier I): the first, awarded in 2001 in Viral Hepatitis/Immunology to Dr. Thomas Michalak; the second, awarded in 2003 in Stroke and Neuroplasticity to Dr. Dale Corbett. In addition, a decision on the awarding of a Tier II CRC in Molecular Signalling in Human Health and Disease is pending. There are some contractually-related research programs in BMS. Further details on faculty funding and research activities are provided in the Division's printed Annual Report for the years 2002-3 and 2003-4, along with CVs of Basic Medical Sciences faculty members (available in the RGS Office). A cumulative annual report for 2004-6 is currently in preparation.

All research is laboratory-based, and students work towards MSc or PhD degrees in Medicine. Enrolment in four graduate programs associated with BMS is approximately 60 students. The four graduate programs, although administered via the Office of RGS, consist of similar elements. All entering students have been assigned a supervisor and a supervisory committee, as well as a tentative

research project. All full-time students receive stipends. The supervising faculty are actively engaged in research and there are core graduate level courses appropriate to each program taught by the participating faculty. Each program has a weekly seminar/journal club series in which graduate students present their research or present critical reviews of topical research publications in their area of specialization. In addition, there is a Visiting Speakers program in which visiting national and international researchers are invited to speak and interact with graduate students and faculty. Detailed descriptions of these 4 graduate programs are available in the RGS Office and on the RGS web site.

BMS faculty play a major role in undergraduate medical and graduate education in the Faculty of Medicine as well as contributing to undergraduate education in the Faculty of Science and School of Pharmacy. As noted above, they also form the core of the four graduate programs in Medicine.

Service on national and international peer review grants committees and faculty and university standing committees together with local community involvement are regular contributions made by BMS faculty. These details, along with lists of publications and peer-reviewed funding for each faculty member, are also contained in the Division's Annual Report available in the RGS Office.

2.2 Division of Community Health and Humanities

The Division of Community Health and Humanities (CHH) began in the early 1970s as an academic unit focused on community medicine. Since then, it has changed its focus and its name three times (Community Medicine and Behavioral Sciences; Community Health; Community Health and Humanities). Today, the Division emphasizes study of the social determinants of health. In late 2005, three humanities faculty joined to create a new Division. A new Associate Dean (Dr. J.T.H. Connor) was appointed to help guide the shaping of the Division (see link on the CHH home page at *http://www.med.mun.ca/comhealth/*).

The CHH faculty is transforming rapidly in size and nature, even in the past couple of months. Three cross-appointed senior faculty from Political Science, Geography, and Economics work with CHH graduate students, and another cross-appointment with Folklore is in process. Faculty also comprise two part-time faculty and three honorary research professors (post-retirement) and professor emeritus who actively teach and supervise graduate students.

Of the 15 full-time (core) faculty, 5 are joint appointments with Biochemistry, History, Nursing, Counselling, the latter two currently federally funded, and a joint clinical appointment with Eastern Health. As well, a search for a CRC (Tier II) in Health Promotion and Community Development has completed, with an application pending; and, jointly with the School of Nursing, CHH is seeking a second CRC (Tier II) in Healthy Aging. While only half (7) hold tenure, a few are eligible for tenure within the next two years. Only two faculty are full professors, with one holding a named, partly endowed chair with separate budget lines (John Clinch Professor of Medical Humanities and History of Medicine). Most core faculty also have multiple careers before joining CHH, in academia, in the professions (medicine, veterinary medicine, nursing), or in both; and their doctorates span the social sciences and some arts. In addition to abbreviated CVs (last five years) on the CHH Web site, hard

copies are available in the RGS office along with full CVs from those faculty who have submitted them. Annual reports provide details of faculty activities in all areas of teaching, research, and service (also available in the RGS office and posted to the Web site).

There are about 50 graduate students in CHH. In addition to graduate supervision and teaching, core faculty teach throughout medicine up to postgraduate education, and full courses in the faculties of Arts and Science. Some hold adjunct appointments at universities outside the country. In the newly added Humanities, Ethics and Law in Medicine area, no students have yet pursued graduate degrees.

Since 2004, some CHH faculty also teach in an innovative, externally funded Master's program in Applied Health Services Research offered with Dalhousie University, the University of New Brunswick, and the University of Prince Edward Island, through a partnership called Atlantic Regional Training Centre (ARTC). Course delivery is mainly by distance: Web-based courses provide standardized course content; teleconferencing and/or Net Meetings complement online courses; and some weekly meetings at each site. At the end of each semester, workshops rotate around the sites. Because students in ARTC are fully funded for the duration of their study, their acceptance is highly competitive. In 2006, the program had its own successful academic review under the auspices of the Canadian Health Services Research Foundation and CIHR, receiving accolades and renewal of the centre for eight years. In addition to its own Web site (*http://www.artc-hsr.ca/index.html*), information is available in print materials in the RGS office: sample ARTC Web pages; Medicine news announcement; national review report 2006; an annual report; *Student Handbook, 2006-7*; *Instructor Handbook, 2006-7*.

With respect to graduate courses, the MSc in Community Health has four required courses in biostatistics, epidemiology, community health, and research methods; that in Applied Health Services Research has eight required courses and an internship. Syllabi are available in the RGS office, along with those from recent special topics courses. As discussed in section 5, CHH has also developed a proposal to mount a new professional (non-thesis) Master's degree in public health (MPH), which is going through the approvals process at Memorial: this degree program will consist primarily of courses.

CHH has 10 office and research staff: two oversee administrative affairs for the whole Division and the undergraduate medical curriculum; three provide secretarial support for faculty; three support contract research in the Health Research Unit (including one permanent position); and one provides support for the Humanities faculty (primarily the Clinch Professor). One staff member, under the title of graduate program coordinator, handles aspects of the graduate degrees in CHH, including enquiries, development and oversight of two Web sites, maintenance of CHH graduate student files, preparation of handbooks and course materials, organizing and participating in workshops in the Atlantic region etc. (25% funding for this position comes from the ARTC program).

CHH operates in effect as an academic department. In addition to meetings and retreats, a Graduate Studies committee was resurrected in 2006 to review and make recommendations on applications for graduate programs in CHH (excluding final recommendations for the ARTC program, which is overseen by a joint committee of four Atlantic universities). This committee supports the work of the academic program coordinator in taking recommendations to the Dean's Advisory Committee on

Graduate Studies and is composed of representatives for areas within CHH: Community Health degrees; ARTC; Nutrition (for a stream in the proposed MPH degree).

Peer-reviewed research in CHH is routinely funded through agencies such as CIHR, Social Sciences and Research Council of Canada (SSHRC), NSERC, Public Health Agency of Canada, Health Canada, Canadian Health Services Research Foundation, National Cancer Institute of Canada, and American Cancer Society in addition to local agencies such as the Health Care Corporation of St. John's and the Newfoundland and Labrador Department of Health and Community Services.

CHH also runs a contract-based Health Research Unit (HRU), with Dr. Vereesh Gadag, as its director; this unit has a Web site (*http://www.med.mun.ca/hru/*) and three research staff. In addition to inclusion of its activities in the CHH annual reports, the HRU published a ten-year review, *Celebrating 10 Years: 1992-2002* (available in the RGS office). Research is performed for agencies such as Eastern Health, the Newfoundland and Labrador Chiropractic Association, and the Janeway Research Foundation.

2.3 Clinical Disciplines

This cluster of areas consists of 10 clinical disciplines (Anesthesia, Family Medicine, Genetics, Medicine, Laboratory Medicine, Obstetrics and Gynecology, Pediatrics, Psychiatry, Radiology, and Surgery) which primarily provide postgraduate medical training, though a number have active research programs which support graduate studies.

In total, there are 34 faculty members across the ten Disciplines who either supervise students or are on supervisory committees, thesis examination boards, or comprehensive examination boards of students from various graduate programs. Both laboratory-based and community or clinically-based scientists are represented in this group. Disciplines currently represented for graduate studies include Medicine, Genetics, Obstetrics and Gynecology, Laboratory Medicine, and Psychiatry. Faculty involved with graduate students in the Discipline of Laboratory Medicine, which include pathology, molecular genetic and cytogenetic labs, are closely linked with the Discipline of Genetics and the graduate program in Human Genetics. Three faculty members in Laboratory Medicine are cross-appointed with the Discipline of Genetics.

The Discipline of Medicine is the largest clinical discipline in the Faculty of Medicine, with 44 geographic full-time members. It encompasses areas of Internal Medicine including Cardiology, Dermatology, Endocrinology, Hematology, Gastroenterology, Geriatrics, Medical Oncology, Nephrology, Neurology, Radiation Oncology, Respiratory Medicine, Rheumatology, and Physical Medicine and Rehabilitation. The majority of this Discipline, who are involved in research and teaching graduate students, are connected to the Clinical Epidemiology program; however, others are associated with the graduate programs of Immunology and Infectious Disease, and Cancer Research.

The largest of the Medicine-associated graduate programs is Clinical Epidemiology, which offers diploma, MSc and PhD streams. The Clinical Epidemiology program was designed primarily to address the needs of clinicians seeking research experience, in particular in clinical trial design, health policy, and

health services. However, it is aimed at university graduates intending a career in health services, faculty members seeking advanced training in clinical epidemiology, medical doctors and health care professionals interested in health care delivery research. Participants in the program develop strong research skills and gain knowledge through core courses, research seminars and the completion of research projects. The program was initially associated with CHH but since 1999 has had its own co-program directors. Faculty for the program are drawn not only from Medicine, but also from the disciplines of Obstetrics and Gynecology, Pediatrics, Psychiatry, Surgery, Laboratory Medicine, and Genetics. The program is also currently seeking a tenure-track joint appointment with the School of Pharmacy. The core faculty involved in the clinical epidemiology program have strong research support from CIHR, Arthritis Society of Canada, NIH, Genome Canada, and the provincial government. More details are available on the program's Web pages (*http://www.med.mun.ca/graduate/pages/epidemiology.htm*).

One of the most active of the Disciplines, in terms of research, is that of Genetics. This Discipline houses the graduate program in Human Genetics, which has both MSc and PhD streams. The Discipline of Genetics was created in 1999 and combines both laboratory-based scientists and clinical researchers. The first Chair, Dr. Banfield Younghusband, was Interim Chair between 1999-2003. Currently, there are 8 full-time faculty members and 5 cross-appointed faculty. Three of the five cross-appointments are from the Discipline of Laboratory Medicine, one from the Discipline of Medicine and one from the Biology Department (Faculty of Science). As well, three new positions have been approved and the search committee for one is currently being assembled. The existing faculty comprise two Professors, three Associate Professors, and three Assistant Professors. A CRC (Tier II) in Genetics/Genomics in the Discipline of Genetics is pending. Five of these faculty supervise graduate students.

This is a small group of researchers who collaborate with one another extensively. Although this Discipline has no annual report as of yet, the faculty members meet three times a year to discuss general Discipline issues and plan future Discipline endeavours. The faculty are well supported by research grants from CIHR; recently a large Genome Canada grant was awarded to one faculty member, who is co-principal investigator with a colleague at Dalhousie University. Almost all of the research performed in this discipline focuses on utilizing the unique population of Newfoundland. The majority of research is on understanding the genetics of Mendelian diseases that are common in the province; although an increasing proportion of research is being performed on complex diseases such as cancer and obesity. The discipline has a weekly journal club with laboratory scientists, clinicians, students and genetic counselors participating. As well, a small number of national and international researchers are invited each year.

Genetics has one office staff and eight research staff. The latter are research assistants who either work in one of the five laboratories or as a clinical research assistant. Further information about faculty, research, graduate programs and graduate students is available on the Web pages for Genetics (*http://www.med.mun.ca/genetics/default.htm*).

3. GRADUATE STUDENT PROFILE

3.1 Description of Graduate Students

Enrolment in graduate studies in medicine has grown substantially over the past 15 years. In 1992, 56 students were enrolled: 43 full time, 13 part time, with 20 PhD and 36 MSc students (1993 Report, p. 3). Today, there are over 190 students. Appendix 3 contains graphics on the number of students in Spring 2006 by enrolment status (full- or part-time; diploma, MSc, or PhD), distribution by program in 2005-6, and two graphs showing total enrolment by year and convocations since 1999.

Since these figures were not yet firm for 2006, the more accurate statistics for this self-study report run to fall 2005. At that time, there were 197 graduate students in Medicine. Appendix 4 provides the graphs and tables of these students to Fall 2005 that are discussed below.

Figures 1 and 2 illustrate the distribution of the total number of students (full-time and part-time) in the eight graduate programs in Medicine: 34 % are in Clinical Epidemiology; 31% are in the four laboratory-based programs associated with BMS; 27% are in Community Health and Applied Health Services Research combined; and 8% are in the Clinical Discipline program of Human Genetics. In all, about 40% are bench-science students, affiliated with the biomedical programs, and about 60% are non-bench, with CHH and Clinical Epidemiology.

The student population has grown steadily over the past ten years, with increased enrolment seen in all Diploma, MSc and PhD programs. Growth in all programs represents two- to three-fold increase for the MSc, and a five-fold increase for the PhD. This trend is seen in Figures 3 to 5.

As indicated in Figure 6, the increases in graduate student numbers have been mainly in the Canadian student population, with few increases in the numbers of international students over the past ten years.

As seen in Figures 7 to 8, the highest number of enrolments is in Community Health and Humanities, with most students being in this and the Clinical Epidemiology program.

Figure 7 shows there has been a relatively constant number of diploma students in Community Health and an increase in Clinical Epidemiology over the past ten years. The Community Health students tend to use the diploma as an opportunity to learn about this research area before transferring to the MSc, whereas the Clinical Epidemiology students tend to use the diploma as an opportunity to learn research methodology without continuing on for a thesis-based graduate degree. As suggested by these tendencies, the type of student in Community Health and Clinical Epidemiology generally differ from the laboratory-based science programs. For example, most PhD students in CHH are working professionals and most Clinical Epidemiology students are MDs (although further analysis of this situation is needed). Hence, both kinds of student tend to study part-time.

Figure 8 shows that some programs have seen an increase in student enrolments in the MSc programs (Cancer, Cardiovascular-Renal, Community Health, and Clinical Epidemiology) whereas other programs have remained relatively static in enrolment (Immunology and Infectious Diseases, and Neuroscience).

It should be remembered that students often transfer to the PhD between the first and second year of the MSc program.

All of the programs have shown an increase in the number of students enrolled in the PhD programs with Cancer Research, Clinical Epidemiology, Community Health, and Neuroscience showing a five-fold increase in student enrolments in the PhD (Figure 9). A PhD in Applied Health Services Research is not yet offered (although students wishing to pursue this area of study can transfer from the Master's program into a PhD in Community Health).

With respect to gender, since 1995, when there was an equal distribution of male and female students, the population of female students has increased considerably; females currently outnumber males by a ratio of 2 to 1. This trend is shown in Figure 10.

The length of time for each degree from entrance to convocation varies considerably. Over the past ten years, the average time to complete a PhD to convocation was just over five years and an MSc took just over four years (see Figures 11 to 15 and Table 1). Figure 12 shows time to finished degree based on data compiled for students who entered in years 1996, 1997, 1998. These times to completion are comparable for PhD students at other Canadian universities but about a year longer for MSc students compared to other Canadian universities.

Data in Figures 13 to 15 show the number of students who have received diploma, MSc or PhD degrees over the past ten years for each of the research areas. The data do not show any striking trends in any of the programs.

As far as student organization is concerned, the Medical Graduate Student Society (MGSS) represents all graduate students in the eight academic units within the Faculty of Medicine. The MGSS (*http://www.med.mun.ca/mgss/profile.html*) is fully ratified by the Graduate Students Union (GSU) and has the full support of the Office of Research and Graduate Studies (Medicine). A panel of executive and committee representatives helps ensure that matters of concern to the medical graduate students are addressed in an appropriate manner. Medical graduate students are invited to sit on various committees within the GSU, SGS, and the Faculty of Medicine and on many sub-committees. These positions are usually filled during the first general meeting of each Fall semester and are held for a minimum of one year. These positions provide excellent opportunities for students to have input into decisions regarding procedures and policies that affect not only current students and faculty members, but also the recruitment of new students and faculty. The GSU at Memorial also distributes a *Handbook* to medical graduate students (copy in RGS office).

As a reflection of the strength of the overall graduate program in Medicine, several PhD and MSc students have secured funding from either internal competitions or externally from various national granting organizations. Table 2 outlines funding sources from national or similar competitions for 2003 to 2005. In 2003, students were receiving external funding from the Canadian Liver Foundation, CIHR (2 fellowships), NLCAHR, Canadian Blood Services, NSERC (2 fellowships). In 2004, students were receiving external funding from CIHR (2 fellowships), NLCAHR, Canadian Blood Services, NSERC (3 fellowships). In 2005, students were receiving external funding from Focus on Stroke Research

Award, CIHR (2 fellowships), NLCAHR, NSERC (2 fellowships). Over this period of time, two of the NSERC awards were the prestigious Canada Graduate Scholarships.

3.2 Activities in Teaching and Research

Full-time students with the appropriate academic background can be employed as undergraduate teaching assistants (generally in the Faculty of Science or the Faculty of Medicine) provided they do not work more than 24 hours per week outside their degree program. However, with respect to teaching in the undergraduate medical curriculum, graduate students in Medicine (especially in Genetics and Immunology programs) only assist in small-group sessions, sometimes handling tutorials as discussion leaders. The graduate students in Neuroscience assist with teaching in the second-year Neuroanatomy labs (ISD2 in second-year MD program). In addition, BMS offers an undergraduate human physiology course to Faculty of Science students, and graduate students act as the lab demonstrators for the labs associated with this course. Senior graduate students sometimes assist with introductory graduate courses as lab demonstrators. Funding for the teaching opportunities is made available through the Faculty of Medicine. Because of the limited teaching responsibilities in Medicine, the Faculty does not participate in the Teaching Opportunity for Graduate Assistance (TOGA) program available the Memorial campus. As part of their own career path toward full-time faculty appointment, however, some students choose to complete the Graduate Program in Teaching through SGS (*http://www.mun.ca/sgs/home/gpt.php*). For more information, the Associate Dean, RGS conducted a small survey of teaching in the past year (available in the RGS office).

There is a vibrant culture of research activities involving students. Generally, program-specific seminar series or journal clubs are attended on a weekly basis, with students participating as presenters. This approach is advantageous in honing their research and presentation skills in their medically-related disciplines. Graduate students also participate in the annual Aldrich Interdisciplinary Lecture and Conference, an event sponsored by SGS and GSU for graduate students with a keynote address in memory of the first Dean of Graduate Studies at Memorial University.

With respect to their own research, as described in section 1.2, students are encouraged to give presentations at national and international meetings. The following table shows the numbers of travel awards to students to support their presentation of research in this way over the past five years.

TRAVEL AWARDS FOR STUDENTS 2001-6

Graduate Program	2001-2	2002-3	2003-4	2004-5	2005-6	Total
Applied Health Services Research	-	-	0	1	1	2
Cancer	3	0	5	5	1	14
Cardio/Renal	0	0	1	0	1	2
Clinical Epidemiology	2	2	1	1	1	7
CHH	3	3	1	2	3	12
Human Genetics	-	0	1	4	1	6
Immunology	5	5	3	3	5	21
Neuroscience	4	6	3	3	8	24

Graduate students in Medicine receive external recognition for their own research as well, such as awards at the CIHR poster competition, journal covers chosen by journal editors based upon the merit of the published paper, etc. A list of student achievements for 2004-5 is provided on the RGS Web site (*http://www.med.mun.ca/graduate/pages/achievements.htm*).

Graduate students also participate in 'Let's Talk Science,' a national program to increase interest in science among school children. They give talks and demonstrations to classrooms, help update classroom material, assist in science demonstrations, judge science fairs, speak on school career days, and run workshops for schoolteachers. Students hosted the Genome Canada Exhibit at the National Science Fair, held in St. John's in 2004 (see *http://www.med.mun.ca/med/Report0304/05science.htm*).

In addition, a visiting speaker series in each of the programs is a highlight of the term, with graduate students attending talks related to their area of study, regardless of whether they are part of the program hosting the speaker. Students are scheduled to meet with the guest speaker over an informal lunch.

Every year, the Faculty runs a series of research activities called 'Scientific Days' (now 'Research Days'). Anchored by the prestigious Gairdner Foundation Lecture, these activities include posters and presentations by faculty and graduate students and are organized by the Associate Dean, RGS (see *http://www.med.mun.ca/med/medATmun1/articles/05oct/05scientificDays.htm*).

There are also other named lectureships, such as the Williams lecture in Neuroscience and the Nigel Rusted Lecture in Humanities, that bring leading scholars to the Faculty of Medicine. Now in its third year, the Rusted Lecture has attracted large audiences from across campus, including medical and graduate students (see *http://www.med.mun.ca/MED/medATmun1/articles/05nov/09BlissRusted.htm*).

3.3 Careers and Locations of Alumni

Graduates of graduate programs in Medicine have considerable success after the completion of their studies. As seen in Table 3, graduates receiving PhDs have secured postdoctoral fellowships and faculty positions in institutions such as Memorial University, University of Toronto, Harvard University, Yale University, Torrey Pines Institute for Molecular Studies, University of Calgary, University of Washington, among others. Master's students continuing with studies generally enrolled in PhD programs here at Memorial or at other universities, in medical school, or in other professional programs.

Summary of Part I

As sections 2.1 to 3.3 in Part I show, over the past 15 years, the graduate studies programs in the Faculty of Medicine have grown substantially in both number and kind, accounting for significant development into areas other than the original bench-science degrees. At the same time, the faculty complement has changed in nature from the original groups of scientists, clinician-scientists, and clinicians: for example, the BMS division currently has a majority of senior (full professor) faculty, most of whom are laboratory-based scientists; the CHH division has primarily mid-career but non-tenured junior faculty, most of whom are from social science and arts disciplines. The student population reflects an increase in numbers of women and Canadian students. Both graduate programs and students in them differ accordingly: diploma students represent part-time, employed (often professional) students; MSc and PhD students in laboratory-based science are typically full-time, with needs for funding that differ from the non-bench science degree students in health.

As indicated, however, the consistent feature underlying these distinctions in number and kind is the emphasis placed on research, and the development of an intensive research culture. This feature perhaps distinguishes biomedical and health faculty from other faculty on campus for whom teaching may be the paramount activity.

These distinctions become more clear in the feedback received from administrators, students, and faculty, as outlined in Part II.

PART II: CONCERNS, ISSUES, AND PLANS

4. Graduate Programs: Interviews and Feedback

The self-study committee developed a questionnaire to guide interviews and elicit feedback from administrators and graduate students (Appendix 5). Sections 4.1-4.4 outline feedback drawn from the questions there.

4.1 Associate Dean, Research and Graduate Studies

In addition to meeting with the self-study committee and its chair on several occasions, the Associate Dean, RGS, Dr. Penny Moody-Corbett, submitted electronically her responses to the questions. A copy of her written submission is included as Appendix 6.

As noted there, Dr. Moody-Corbett states that there was a very strong commitment by faculty for graduate studies. Indeed, in discussions Dr. Moody-Corbett has emphasized that the non-departmental nature of the graduate faculty in particular can be seen as a strength. In addition, Dr. Moody-Corbett observes that a good working relationship exists with both the senior administration in the Faculty and at SGS. The Dean of Medicine is very supportive of the graduate programs and recognizes the value of a strong research environment which is strengthened by a successful graduate program. The Faculty of Medicine is often asked to contribute to committees to review policy and procedures for the SGS. The RGS office itself has staff that is very competent and knowledgeable.

Dr. Moody-Corbett notes lack of space for graduate students as an issue. As she explained later, this was recognized in all programs. Graduate students in biomedical areas often do not have work space other than laboratory bench space. Students in CHH, Clinical Epidemiology and Applied Health Services Research often have shared office space but no dedicated space for conducting confidential interviews required by their research.

In her questionnaire response, the Associate Dean, RGS also outlines the key issues with respect to funding of students, especially increased support for postdoctoral fellows and increasing the basic level of stipend support from $12,000.

In reviewing the draft self-study report, Dr. Moody-Corbett clarified that the financial allocation from SGS is based on a formula which varies depending on academic unit. The Faculties of Medicine and Engineering had traditionally received less support than other academic units, although over the past three years this has increased so that the allocation is now similar to that available to the Faculty of

Science. However, the Associate Dean, RGS would prefer to see all the academic units on a common formula.

SGS also has restrictions on how its allocation may be used by the academic units. For instance, financial support is limited to the first two years of the Master's program and the first four years of the PhD program. Given that the time to completion of graduate studies exceeds this time frame, both locally and nationally, this restriction should be re-visited. SGS has recently established a committee to review the SGS policy on graduate student funding, and the Associate Dean, RGS is a member of this committee.

In some programs funding for graduate students may be perceived as representing a conflict of interest. Dr. Moody-Corbett has suggested that organizations wishing to support employees in the graduate program in the Faculty of Medicine may wish to establish a separate fund for student support be set up in Medicine to which such organizations can contribute. Their own employee-students can then apply to receive funds in a competitive fashion.

Other potential conflicts of interest involve graduate students supervising other graduate students in their mutual work environments external to the university, perhaps using workplace-based research for the degree program. The Associate Dean, RGS maintains that an arms-length policy needs to be established for these types of situations.

Many of the other comments in Dr. Moody-Corbett's questionnaire response provide context from her administrative perspective for the information she provided for this report. Her comments on plans for development over the next five years are included in section 5.

4.2 Associate Deans, Divisions

This section summarizes discussions with the associate deans for two Divisions, Dr. J.T.H. Connor (CHH) and Dr. Karen Mearow (BMS), based on the six questions.

The two associate deans indicated that the graduate programs are successful and working very well. They emphasized that the strength and success of Memorial lies in its relatively small size, allowing for a good *esprit de corps* to develop among faculty in Medicine. The students in BMS, for example, have good laboratory experience and good supervision, with a great deal of contact with faculty and their supervisors. Colleagues outside Memorial have said that students are very well trained here as a result of this laboratory experience. Another measure of this success is seen in the list of reputable institutions where graduates have gone after Memorial (see Table 3).

For them, areas for improvement revolve around space, policy documentation and communication, funding, and perception of the 'units' within Medicine.

There is a definite lack of space in both areas, which needs addressing in order to grow the graduate student population.

Both suggested that documentation and communication need attention. A separate print calendar for graduate studies would help to orient prospective and current graduate students more clearly than the University's combined version. A similar sentiment was shared concerning the Web site for RGS, which should be revised to provide more relevant and up-to-date information for faculty and current and prospective students.

They suggested that senior administration needs to realize that graduate studies is not a service function but an integral, and very strong, part of the Faculty of Medicine and a respectable university; hence, there should be equal opportunities for graduate students as there are for medical students with the Faculty of Medicine.

The funding of students is a 'huge,' perennial issue. Funding for stipends, and especially travel, was identified as inadequate. With respect to funding received from SGS, one associate dean remarked that Medicine has the lowest funding relative to other academic units at the university. In addition, the four-year cap on funding is problematic. Based on the SGS formula, it often appears that success in obtaining research grants is being penalized; for example, if a student brings in four years of external funds but needs just another six months to complete the degree, he/she is not eligible for funding from SGS–even though no funds have been received by SGS in the previous four years. It was suggested that more flexibility in time limits is needed and that individual cases should be considered based upon their merit. On the other hand, there is an apparent 'catch 22' that if a student doesn't have external funds, he/she can't be a full-time student in Medicine–clearly a problem with respect to students wishing to pursue humanities-oriented degrees. Another issue that was raised dealt with the lack of provincial funding in Newfoundland and Labrador for graduate students (e.g., scholarships/fellowships such as those available in other provinces).

Finally, the Associate Dean, CHH raised questions about administrative structure for graduate studies in Medicine: what constitutes the 'graduate faculty', who determines who is competent to supervise PhD students, and so on? Lack of officially acknowledged departmentalized structure in Medicine also impedes efforts, sometimes leading to confusion, duplication of effort, and so on. At the same time, as this APR review indicates, SGS and other administrators at Memorial seem to treat graduate studies in Medicine as a cohesive academic unit (a 'department'). More traditional organizational structure, with greater transparency, might be needed in light of the proposed university growth in graduate student numbers. The approach taken in Medicine until now ('one size fits all' for graduate programs) may no longer be the best one, especially if new programs are proposed in humanities fields.

In short, while things have generally been working well, if Memorial wants to increase the number of graduate students, we need more space and funds or faculty will have to turn down applicants.

4.3 Graduate Program Coordinators

This section summarizes discussions with the program coordinators, based on the same six questions. Highlights of the discussions are summarized according to academics, funding, space, communication, and administration. Individual feedback from each of the coordinators is provided in Appendix 7.

There was universal positive feedback from the program coordinators with respect to the administrative support provided by the Office of Research and Graduate Studies (Medicine), including that offered by both the Associate Dean and her staff. The availability of funding and other financial support provided through the RGS office was also recognized as having a positive influence on the Faculty of Medicine's efforts in the development of its graduate programs. A continued need for student funding for both stipends and travel was stressed with a strong desire to increase the levels of funding in both areas. With respect to the academic quality of graduate programs, there was consensus that programs were running smoothly, there was good rapport between students and faculty, and the quality of students attracted to the various programs was good. There was mixed feedback concerning student recruitment. Some programs appear to have more applicants than can be accommodated while others felt a need to enhance efforts in this direction by perhaps establishing a more formal mechanism for recruitment. It is also noted that graduate enrolment and the number of applicants has significantly increased in recent years.

Academics

In general, coordinators considered their respective graduate programs were functioning well and on solid academic grounds, including supervision, quality of courses and other aspects of graduate work. One concern raised by several program coordinators was the problem of having students begin graduate studies then leave in the middle of their programs to pursue the MD degree. It was suggested that the problem of incomplete graduate programs may be addressed by having a conditional acceptance into the undergraduate medical program contingent upon completion of the graduate degree.

The option of a MSc program with a thesis defense was suggested by two coordinators, who viewed this as adding more academic credibility to the Master's degree. Several of the basic science program coordinators expressed an interest in developing basic laboratory techniques courses (i.e., immunological techniques and basic molecular biology techniques) which could be made available to all students in the four bench-science programs. Similar courses were offered previously. However, these types of courses require financial support since disposable supplies are required.

The Chair of the Discipline of Genetics and the program coordinator for Human Genetics both reported an interest in fostering more interdisciplinary research.

Funding

All program coordinators stressed the need for more funding for both studentships and travel awards. There needs to be an increase in the value of studentships in order to make them more competitive on a national basis, and the number and value of student travel awards should be increased as this was deemed to be essential in student scientific development.

An area of general concern among many coordinators was the policy of the School of Graduate Studies concerning time limits and student funding. Currently, the maximum length for which a Master's student may receive funding is two years and for a PhD student it is four years, both falling short of national averages for graduation rates in both programs. It was felt that there were justifiable circumstances for which students may require an additional semester or two of support. This is not possible at present. Some flexibility with SGS on this issue was suggested.

Space
Space issues were identified by all coordinators. Students in the biomedical programs are in need of office space, in addition to their laboratory space. Graduate students in CHH have recently been displaced to make room for new faculty. Students in the Applied Health Services Research program, who were originally designated space, have had this decision reversed as a result of changes in administration. The Human Genetics program has seen rapid expansion, and need for both laboratory and office space is critical. Future growth and development for all programs is severely curtailed by lack of such space. It was also felt that space for "leisure" activities was not available to graduate students although undergraduate medical students enjoy such amenities. Graduate enrolment is approaching undergraduate levels, yet graduate studies does not receive comparable recognition in this regard by the Faculty of Medicine.

Communication
The RGS Web site was identified by three coordinators as inadequate. Much information is either out of date or requires additional information with respect to individual graduate program details. It was also felt that basic information, such as policies on transfer from the MSc to PhD program, changing of supervisors, information on comprehensive examinations, etc. should be available on the Web site. It was also suggested by some program coordinators that the faculty and the RGS office should be doing more to promote graduate programs and highlight their successes. This would not only assist in recruitment efforts but also create a higher profile for graduate studies.

Administration
While considerable favorable feedback was received for the overall administrative support provided through the RGS office, one area of dissatisfaction among many coordinators was delays experienced in processing routine work, especially with respect to admissions letters, funding notification to new students and account debiting to individual faculty research accounts for student support. Some of this is attributed to the policy of having all eight coordinators sign off on new admissions into all programs, causing unnecessary delays. The problem is not attributed to the administrative staff of RGS but to this current policy requiring vetting by each program coordinator. An alternative policy is encouraged.

4.4 Graduate Students

Seventeen full- and part-time graduate students responded to the questionnaire and raised various points. In general, students felt that the availability of faculty and the administrative support from the RGS office were positive. Small class sizes, journal clubs and visiting speaker seminars were highlighted as positive points in the programs. Students' concerns centered on lack of space in their respective labs, a need for more financial support in the form of greater stipends, and most commonly, a lack of adequate funding for travel to conferences which was mentioned as crucial in being competitive in the students' respective fields of study.

Specifically, students' concerns were as follow:

- The most prevalent concern was regarding quality of the graduate studies Web site for providing easily accessible information to students (a major issue was that while administrative staff were quite proficient, students were often uninformed about the administrative services available to them); students felt that the Web site was also a poor student recruitment tool.
- A need for higher level of financial support; in the same regard, students suggested that the minimum allowed stipends for PhD and MSc students should be increased to compete with other institutions in Canada.
- Many students mentioned lack of space in their respective labs.
- A lack of adequate funding for travel to conferences which was mentioned as crucial in being competitive in the students' respective fields of study.
- Some students felt that there needs to be some consistency in the amount of time required for completion of a degree (between research groups).
- Part-time students often mentioned the fact that they are ineligible to receive stipend support (as well as travel support to attend conferences).
- Most students mentioned that their respective programs had grown during their studies and suggested that addressing the major concerns (financial support, space, and organization/improvement of the Web site) would be a stepping stone to improving recruitment and further growing the programs.

4.5 Other

The open session for faculty was poorly attended, mainly owing to its scheduling in mid-summer. However, about half a dozen provided helpful comments and direction to the committee in this session. Only one e-mail was received from a faculty member who outlined a concern about the admission process for graduate students.

This self-study thus highlighted inadequate channels for dissemination of information to all faculty, with no central place for posting important Council materials for review (such as a Network drive, or a secure Web page).

Concerns were raised by faculty mainly within CHH, which routinely discussed graduate studies at its reconstituted graduate studies committee, June retreat, and monthly meetings. Concerns in this Division focused on policies and procedures for admissions, organizational structure of the Faculty of Medicine, and a lack of understanding within Medicine for different methodological approaches and needs in graduate studies. In particular, the need for a supervisor before a student can apply for a Master's degree can be problematic for community health; as one faculty member stated, 'Requiring external funding can be regarded as exclusionary for international (and other) students who have financial resources and competence but not the Canadian requisites to get external funding.' This faculty member also would like graduate applications vetted in a manner to facilitate the admission of Aboriginal students. The uniqueness of the ARTC program, with only one intake in Fall, has raised issues related to delays in the signing process in RGS. Suggested solutions for accelerating applications included delegating a second

signer when the coordinator is unavailable; requiring only a few signatures (e.g., four) rather than eight; and moving up the date for review of applications and recommendations to a single meeting in early spring at which all coordinators will be present for signatures.

The Vice Dean of the Faculty of Medicine, Dr. Sharon Peters, raised a concern related to the accreditation process for undergraduate medical education: namely, to clarify the nature of any graduate student teaching in the medical curriculum. Subsequent discussions led to the description of graduate student teaching provided in section 3.2. In addition, the following observations were made:

1. graduate students who do 'teach' in the undergraduate medical curriculum are under the direction of either the course chair or section coordinator; the latter faculty typically provide materials (handouts, course objectives etc.) to them; and they would only be assessed for their teaching skills by those responsible for administering course evaluations in the undergraduate medical curriculum (i.e., not RGS).
2. graduate students have not identified any of these issues as a concern for them as novice teachers (though this does not mean that they do not exist).

5. Plans for Graduate Studies in Medicine

The Associate Dean, RGS listed several areas where she sees Graduate Studies focused in the next few years. In particular, Dr. Moody-Corbett noted that there has been a shift from a graduate program that primarily offers MSc degrees to one with a strong PhD program. She would like to see this trend increase, such that we become recognized as a research-intensive Faculty of Medicine with a strong PhD program. She is interested in seeing the establishment of a Master's in Public Health (MPH) since she believes we have the appropriate faculty complement to do this, student interest and provincial need. She is interested in an increase in financial support for the students: a minimum of $12,000 is too low, and there should be more opportunities to provide better support for student travel. Given our location, the cost of travel and the importance of presenting research data nationally and internationally, we need to improve the financial support for travel for our students to attend meetings. In addition, she commented that the Faculty of Medicine should look at a mechanism of supporting post-doctoral fellows. She identified a need to address the problem of space and an interest in having designated study space for graduate students. She noted that graduate students are often not aware of support services (to deal with issues of personal challenges such as addictions, suicide, etc.) available to them, this structure not being as apparent as it is to the undergraduate or postgraduate students in the Faculty, and seeks an office in the Faculty that addresses counseling needs for all students for issues of addiction, suicide, etc. She pointed out that an increase in graduate student numbers would put an additional demand on office staff and space and that this would require an additional staff person and an increase in space for files.

A major plan for new graduate programs in Medicine over the next couple of years involves the proposed new Master of Public Health (MPH). CHH held a day-long meeting on June 9, 2006 to review its diploma, MSc, and PhD programs of study in light of its proposal to develop this new degree. All full-time faculty attended this session, along with three active part-time faculty. The MPH is more

attractive to students of community health as a course-based, professional degree program leading to a recognized (and highly marketable and portable) credential after 12 months of full-time study. As a terminal degree, the MPH is more applied in nature and focuses on preparing graduates for public health practice.

The MPH was recommended in the 1993 Report on graduate studies in Medicine and clearly fits the intellectual endeavour and professional experience of faculty in CHH; furthermore, the idea has recently received government support. The Public Health Agency of Canada is pushing for the MPH as the primary qualification for public health professionals and for the development of MPH programs nationally. Dr. Richard Audas, who is a regional representative on the Public Health Agency of Canada MPH Guidelines Working Group, has taken the lead in developing the proposal for this degree. The proposal has been submitted to SGS and CIAP for consideration and has been revised following comments from these two units. It is envisaged that the MPH will have two specialization streams: population and public health; and nutrition and dietetics. The latter will be overseen by Dr. Barbara Roebotham. To ensure accreditation through the national dieticians organization, this stream of the MPH needs to offer a 40-week internship and a compulsory research component. It will therefore take 6 semesters to complete; intake is expected to be 4-5 students per year. The stream in population and public health should take 3 semesters to complete, and annual intake is expected to be 8-10 students.

This CHH meeting in June helped to streamline the proposed curriculum for the MPH while improving both the current MSc program and all course offerings to accommodate faculty (including many new faculty) and scheduling. Other decisions for the MSc in community health include

- re-vamping the graduate seminar course to render it more rigorous and more useful for students writing a thesis (with in-depth sessions on ethics, plagiarism, HIC, information-seeking strategies, etc.);
- modifying the existing research methods and social science and health courses to cover a wide range of research methodology and academic disciplines;
- requiring PhD students to demonstrate competence in the four core areas.

Faculty are now working on these revisions to the whole curriculum and their individual syllabi, along with new course proposals, to address the needs of all degree programs in CHH. Revised courses are expected to be offered in Fall 2007.

Summary of Part II

As Part II indicates, most of those providing feedback (administrators, including coordinators, students, other faculty) are satisfied with the operation of the Research and Graduate Studies office. Both strengths and areas for improvement were identified, with considerable agreement on these issues (as outlined succinctly in the Synopsis to this report).

However, this feedback also demonstrates again some divergence in approaches and issues for the two main groups of faculty responsible for graduate studies in the Faculty of Medicine: laboratory-based scientists and health-related researchers.