

Academic Year 2004 **BACKGROUND INFORMATION ABOUT THE  
SCHOOL**

**a. Insert a copy of the school's current entry in the AAMC *Directory of American Medical Education*.**

**((Section I - Appendix 1))**

Information copied from the Directory of American Medical Education 2004-2005 pages 264-265, not available on website.

**b. Indicate on a separate page any changes in administrative positions or personnel that have taken place since the directory was published.**

Vice President (Academic) and Pro Vice Chancellor E. Campbell

Vice President (Administration and Finance) K. Decker

Dean of Medicine J. Rourke, MD

Associate Dean, Basic Medical Sciences K. Mearow, PhD

Associate Dean, Community Health R. West, PhD (Acting)

Assistant Dean, Student Affairs J. Harris, MD

Assistant Dean, Undergraduate Medical Education M. Wells, MD

Chair, Medicine A. Sclater, MD

Chair, Laboratory Medicine D. Fernandez (Acting)

**SECTION I. INSTITUTIONAL SETTING**

**Part A: Key Quantitative Indicators**

Please provide the following information, using your school's copy of the Longitudinal Statistical Summary Report as the data source.

a. Number of **vacant department chair positions**

1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
0	0	0	0	0	0	0	0

b. Total numbers of **enrolled master's and doctoral students in graduate programs in the biomedical sciences**

Biomedical

1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	
Master's	33	34	27	30	30	28	34	49
Doctoral	11	11	22	25	30	28	27	26

Clinical Epidemiology

1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	
Master's	17	25	22	20	34	34	30	39
Doctoral	1	2	5	5	9	8	10	10

Community Health

1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	
Master's	16	18	21	19	18	22	19	27
Doctoral	1	0	1	1	3	4	5	6

c. Total numbers of **residents and clinical fellows** on duty in ACGME-approved programs that are the responsibility of the medical school faculty

1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	
Residents	205	206	191	189	173	175	172	198
Fellows								

d. Percentage of **graduating students who participated in a research project** with a faculty member

1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04
20	13	13	13	13	24		

## **SECTION I. INSTITUTIONAL SETTING**

### **Part B: Narrative Data and Tables**

**IS-1. An essential goal of each program of medical education leading to the MD degree must be the meeting of standards for accreditation by the LCME.**

*The accreditation process requires educational programs to provide assurances that their graduates exhibit general professional competencies that are appropriate for entry to the next stage of their training, and that serve as the foundation for life-long learning and proficient medical care.*

*While recognizing the existence and appropriateness of diverse institutional missions and educational objectives, the LCME subscribes to the proposition that local circumstances do not justify accreditation of a substandard program of medical education leading to the M.D. degree.*

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**Provide a brief statement of the mission and goals of the medical school.**

#### **MISSION AND OBJECTIVES OF THE FACULTY OF MEDICINE**

The Mission of the Faculty of Medicine is as follows:

*Our purpose is to enhance the health of the people of Newfoundland and Labrador by educating physicians and health scientists; by conducting research in clinical and basic medical sciences and applied health sciences and by promoting the skills and attitudes of lifelong learning*

The objectives of the Faculty of Medicine are consistent with the objectives of Memorial University of Newfoundland in developing and maintaining excellence in the quality of its academic standards and of research, establishing programs to meet the expanding needs of the province and of providing the means to reach out to all the people.

The Faculty seeks to attain these objectives through an organizational structure which allows optimum interaction among the various disciplines within the Medical School and with other Faculties and Schools as appropriate.

The organizational structure includes interactions with hospitals and other institutions affiliated with the University. The term 'Medical School' refers to the wider organizational structure of the Faculty of Medicine within the University and the Affiliated Hospitals and institutions.

The specific objectives are:

1. To teach medical students to be physicians; and to provide such learning experiences as will inspire all medical graduates of the school to be prepared to practice medicine at the highest standards, serving all individuals and societies in the pursuit of health.
2. To acknowledge the special geography of this Province by encouraging the education of physicians with exemplary skills for rural practice.
3. To educate and train graduate and diploma students in the health sciences.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

4. To provide postgraduate educational experiences in medicine and the medical sciences such that the graduating Canadian physicians will pursue further studies within the school's postgraduate programs, leading to certification in family medicine or specialist subjects, especially in those areas where deficiency in numbers is currently recognized or anticipated.

5. To instill within students at all levels:

a) The wish and the capacity to further the practice and science of medicine through the creation of new knowledge for the improvement of the health of the world's peoples. b) The wish and the capacity to improve their own professional practice through continuing self-assessment and scholarship. c) An appreciation of their evolving roles as members of a team of professionals possessing complementary skills.

6. To attract faculty members who will together:

a) Act as a resource in providing undergraduate, graduate, postgraduate, and continuing medical education. b) Contribute to the advancement of educational methods. c) Practice the highest quality of primary, secondary, or tertiary care medicine. d) Show leadership in promoting research into the health of the individual and the community, including the organization of health care delivery systems. e) Facilitate and promote education and research appropriate to our mid North-Atlantic environment.

7. To provide educational experiences in the health sciences to students from other Schools or Faculties of Memorial University of Newfoundland and of other educational institutions.

8. To provide Continuing Medical Education experiences which will help physicians to maintain and enhance their competence in medical skills.

9. To provide a learning environment for undergraduate, graduate, and postgraduate students of medicine and the medical sciences who are citizens of other countries.

10. Actively to provide an Informational, Educational and Consultative resource for the whole community.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-1-A. **Each medical school must engage in a planning process that sets the direction for the institution and results in measurable outcomes.**

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**a. Provide an executive summary of the current medical school strategic plan, if any.**

The current Faculty of Medicine Objectives were adopted unanimously by Faculty Council in November, 1996. At the last retreat in November 2002, they were reaffirmed as still appropriate for the mission of the Medical School. These objectives (strategic directions) are identified in IS-1.

**b. Date of most recent review or revision of the strategic plan:**

November 2002

**c. How often is the plan reviewed or revised?**

Every 5-8 years. Though we had a focused retreat in 2002, the plan will be to use the results of the hospital, postgraduate and undergraduate accreditations this year to develop our future strategic directions.

**d. Briefly summarize or outline the planning process, including the main participants and the names or titles of individuals or groups whose approval is required to finalize the plan.**

The most recent Faculty retreat was held in November, 2002. The Retreat Steering Committee was comprised of

- Dean
- Vice Dean
- Division of Basic Science representative (1)
- Division of Community Health representative (1)
- Division of Clinical Sciences (2)
- Postgraduate student representative
- Undergraduate student representative
- Finance officer
- Information Officer
- External Consultant

The goal for this retreat was to chart the future direction in two key areas; distributive learning and research. Invitees included full and part time faculty, administrative staff, stakeholders and partners<sup>1</sup> and students<sup>2</sup>. An action committee was established to develop the next steps. Decisions relates to policy need Faculty Council approval. Resource Management would provide advice to the Dean on matters of planning, development, management and control of resources.

<sup>1</sup> Department of Health and Community Services, CEOs and Medical Directors of Health Care Boards

<sup>2</sup> Undergraduates, postgraduates trainees and graduate students

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-2. **A medical school should be part of a not-for-profit university or chartered as a not-for-profit institution by the government of the jurisdiction in which it operates.**

*Accreditation will be conferred only on those programs that are legally authorized under applicable law to provide a program of education beyond secondary education.*

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**a. Year of initial chartering:** Not Applicable

**b. Type of charter (check one):** Not Applicable

Not-for-profit
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Commercial, for profit
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LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-3. **If not a component of a regionally accredited institution, a U.S. medical school must achieve institutional accreditation from the appropriate regional accrediting body.**

*The LCME is recognized by the U.S. Department of Education as an accrediting agency for educational programs, specifically for the accreditation of medical education programs leading to the M.D. degree. Because the LCME is not recognized as an institutional accrediting agency, it lacks standing to accredit stand-alone medical schools as institutions of higher education.*

*Institutional accreditation is granted by regional accrediting agencies, and is required to qualify for federal financial assistance programs authorized under Title IV of the Higher Education Act. Some regional accrediting bodies grant “pre-accreditation” as a first step to achieving full accreditation. In such circumstances the attainment of pre-accreditation status would meet the requirements of this standard.*

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**a. Regional accrediting body (check one):**

Not Applicable

Middle States Association of Colleges and Schools
New England Association of Colleges and Schools
North Central Association of Colleges and Schools
Northwest Association of Schools and Colleges
Southern Association of Colleges and Schools
Western Association of Schools and Colleges

**b. Current institutional accreditation status:**

Not Applicable to Above – Fully Accredited by LCME

**c. Year of next regional accreditation survey:**

Not Applicable – Next LCME/CACMS Accreditation Review 2005

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS- 4. **The manner in which the medical school is organized, including the responsibilities and privileges of administrative officers, faculty, students and committees must be promulgated in medical school or university bylaws.**

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**a. Provide a copy of the faculty bylaws that apply to the medical school, or the URL of the web site where they can be viewed.**

**((Section I – Appendix 2))**

**Memorial University of Newfoundland, Faculty of Medicine, By-Laws of Faculty Council**

**b. Date of their most recent revision:**

December 1981

**c. Briefly describe how they are communicated to the faculty.**

In the past, this information has been included in a Faculty of Medicine Handbook. This document is under review and revision and when completed will be posted to the Dean's Office website.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS- 5. **The governing board responsible for oversight of the medical school must be composed of persons who have no personal or pecuniary interest or other conflict of interest in the operation of the school, its associated hospitals, or any related enterprises.**  
IS-6. **Terms of governing board members should be overlapping and sufficiently long to permit them to gain an understanding of the programs of the medical school.**

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a. **Check any units for which the governing board is directly responsible:**

•	Parent University
	Health Science Center
•	Medical School
	Other (describe below)

b. **Name of board chair:**

Mr. Lorne Wheeler

c. **Year of Appointment:**

2004

d. **Summarize the procedure for appointment and renewal of board members, including length of term and staggering of appointments, if appropriate. Note any specific mechanisms intended to prevent conflicts of interest among board members. If the medical school has its own board of trustees, or is overseen directly by a subcommittee of the university or health science center board, provide a separate description for appointment and renewal of its members.**

Taken from the "Memorial University Act"

#### **Constitution of board**

22. (1) The Board of Regents of the Memorial University of Newfoundland is continued.

(2) The board shall consist of

(a) by virtue of their office

(i) the chancellor of the university,

(ii) the president of the university, and

(iii) the vice-president of the university who is the pro vice-chancellor;

(b) 6 members elected by the alumni association of the university;

(c) 17 members appointed by the Lieutenant-Governor in Council; and

(d) 2 members appointed by the Lieutenant-Governor in Council being full-time students of the university who

(i) meet the requirements set out in the regulations, and

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(ii) are recommended to the Lieutenant-Governor in Council by the board upon a joint recommendation to it by the Council of the Students' Union and the officer of the university designated as being responsible for student affairs.

(3) The chairperson of the board shall be appointed by the Lieutenant-Governor and the board shall elect 1 of its members to be a vice-chairperson.

(4) The chairperson of the board shall be the presiding officer at all meetings.

(5) In case of the absence or disability of the chairperson, or in the case of there being a vacancy in the office of chairperson, the vice-chairperson shall possess the powers and perform the duties concerning the office of chairperson.

(6) An entry in the minutes of the board recording the absence or disability of the chairperson, or the existence of a vacancy in the office of chairperson, shall be conclusive evidence of the fact so recorded.

Members normally serve three years and their term can be renewed.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS- 7. **Administrative officers and members of a medical school faculty must be appointed by, or on the authority of, the governing board of the medical school or its parent university.**

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**Briefly describe the role of the governing board in the appointment of administrative officers and faculty of the medical school.**

Recommendations for appointment are received by the Dean of Medicine from Associate Deans and Clinical Chairs. The Dean of Medicine forwards an appropriate appointments package to the Vice President (Academic) for review and discussion with the President of the University. When this process is complete, the recommendation is forwarded to the Board of Regents for the next available meeting for review and approval. Official appointment letters are sent directly from the Board of Regents to the candidate with a copy to the Dean of Medicine.

For Associate Deans and Clinical Chairs, the Dean receives a recommendation from the Search Committee Chair

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-8. **The chief official of the medical school, who usually holds the title “dean,” must have ready access to the university president or other university official charged with final responsibility for the school, and to other university officials as are necessary to fulfill the responsibilities of the dean’s office.**

IS-9. **There must be clear understanding of the authority and responsibility for medical school matters among the vice president for health affairs, the dean of the medical school, the faculty, and the directors of the other components of the medical center and university.**

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**a. Provide a job description for the dean and, if applicable, the vice president for health affairs or equivalent.**

The following is extracted from an advertisement for new Dean 2003.

The Faculty operates on a non-departmental system, with faculty members divided into three broad areas. The Division of Basic Medical Sciences has graduate programs in Cancer Biology, Cardiovascular Sciences, Immunology and Neurosciences and includes expertise in anatomy, biochemistry, endocrinology, immunology, molecular and cell biology, pharmacology and physiology. In the Division of Clinical Disciplines faculty members specialize in anesthesia, family medicine, genetics, medicine, obstetrics and gynaecology, oncology, pathology, pediatrics, psychiatry, radiology and surgery. The Division of Community Health covers behavioural sciences, community medicine, epidemiology and biostatistics, genetics, health care and delivery and occupational health. There is substantial collaboration across these three divisions in both teaching and research.

**Role Description**

The Dean is expected to develop and articulate an engaging, inspiring strategic vision for the future of the Faculty. The successful candidate must work effectively with the leadership of the University, Faculty and affiliated health care organizations to ensure the highest quality of medical, graduate and post-graduate education and research together with the delivery of health care in the Province. These objectives will be achieved by sustaining an aggressive agenda of research and education agenda, recruiting new faculty members and securing the resources necessary for these goals. The Dean will also lead the day-to-day administration of the Faculty and exercise prudent fiscal management. He or she will be responsible for strengthening partnerships with clinical affiliates, developing collaborative opportunities with other schools, colleges and universities and building effective relationships within the University, the Department of Health and Community Services, the Health Care Corporations and partners in industry and the broader community.

Because the Faculty of Medicine is funded directly by the Department of Health and Community Services, the management of this particular relationship will be critical to the Dean’s success, as will his or her ability to develop other sources of funding for the Faculty.

The Dean of Medicine plays a crucial role in the Province as a key advocate of health care issues and as an interface between the University and the community.

**Background Requirements**

The new Dean of Medicine must offer Memorial a credible and sustained record of achievement as a clinician or in medical research or community health. The Dean will combine a strong educational background with experience in leading and successfully managing large complex organizations. The successful candidate should be sensitive to issues in community health, familiar with the Canadian health care system and able to demonstrate the ability to form and sustain strong professional relationships with people at different levels and with organizations of various cultures.

**b. Supply a chart showing the relationships between the medical school and university administration, other schools and colleges, institutes, centers, etc. Include, if appropriate, the reporting relationships for the director of any teaching hospitals owned or operated by the medical school or university.**

**((Section I – Appendix 3))**

**Organizational Chart – Faculty of Medicine**

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-10. **The dean must be qualified by education and experience to provide leadership in  
medical education, scholarly activity, and care of patients.**

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**Attach a brief resume of the dean's academic and administrative experience (not a full  
curriculum vitae).**

Brief biography of Dr. James Rourke  
MD,CCFP(EM), MCISc, FCFP

Dr.  
James  
Rourke

Dr. James Rourke became Dean of Medicine and Professor of Family Medicine at Memorial University of Newfoundland on April 5, 2004. He previously served as the assistant dean of Rural Regional Medicine at the University of Western Ontario, where he was a professor in the Department of Family Medicine.

Dr. Rourke grew up on a farm and attended a one room rural public school. He graduated with his MD from University of Western Ontario in 1976, where he completed his Family Medicine training in 1978 and his Masters of Clinical Science (Family Medicine) in 1993. He is certified by the College of Family Physicians of Canada in Family Medicine (1978) and emergency medicine (1985) and was awarded Fellowship in 1990.

Dr. Rourke was an active rural family physician (including obstetrics and emergency work) in Goderich, Ontario for 25 years with his wife and partner Dr. Leslie Rourke. Their practice was one of the primary UWO Rural Family Medicine Teaching sites.

He was the founding director of the Southwestern Ontario Rural Regional Medical Education, Research, and Development Unit (SWORRM), founded in 1997 and funded by the Ontario Ministry of Health to develop, integrate and co-ordinate rural medicine at the University of Western Ontario. He worked with UWO and 33 communities, family physicians, and specialists to build a strong, integrated undergraduate and postgraduate rural and regional medical education network that helped set the stage for a major expansion in the UWO medical school

Dr. Rourke has a long-standing interest in rural medicine, and is a recognized leader at provincial, national and international levels. As Project Director, Medical Education Design Team (2000-2001), for the Northern Ontario (Rural) Medical School Project proposal, Dr. Rourke was very involved in the initial development work that led to approval to build the Northern Ontario Medical School. He is Chair of the WONCA (World Organization of Family Doctors) Working Party in Rural Practice that has organized 6 world rural health conferences and is currently involved in developing a joint WONCA/WHO project "Health for All Rural People".

Dr. Rourke has received many honours and awards, including the D.I.Rice Merit Award from the College of Family Physicians of Canada, the UWO Award of Excellence in Teaching by Part-time Faculty, the UWO Martin J. Bass Recognition Award for Exceptional Contribution to Family Medicine, and the Community Teacher of the Year from the Ontario College of Family Physicians. He has had more than 60 journal articles published. Some recent examples are listed below.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

- Rourke J. An honour and a privilege. *Canadian Family Physician* 2004;50:983.
- Curran V, Rourke J. The role of medical education in the recruitment and retention of rural physicians. *Medical Teacher* 2004;26(3):265-272
- Rourke J, Incitti F, Rourke LL, Kennard M. Keeping family physicians in rural practice: solutions favoured by rural physicians and family medicine residents. *Canadian Family Physician* 2003;49:1142-1149.
- Incitti F, Rourke J, Rourke L, Kennard M. Rural women physicians: Are they unique? *Canadian Family Physician* 2003;49:320-327.
- Rourke J. Building the New Northern Ontario Rural Medical School. *Aus J Rural Health* 2002;10:112-116

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-11. **The medical school administration should include such associate or assistant deans, department chairs, leaders of other organizational units, and staff as are necessary to accomplish the missions of the medical school.**

*There should not be excessive turnover or long-standing vacancies in medical school leadership. Medical school leaders include the dean, vice/associate deans, department chairs, and others where a vacancy could negatively impact institutional stability, especially planning for or implementing the educational program. Areas that commonly require administrative support include admissions, student affairs, academic affairs, faculty affairs, graduate education, continuing education, hospital relationships, research, business and planning, and fund raising.*

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**a. Attach a chart showing the organization of the dean's office.**

**((Section I – Appendix 4))**

**ORGANIZATIONAL CHART FACULTY OF MEDICINE, DEAN'S OFFICE**

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

**b. If any associate or assistant deans function on a part-time basis in those roles, list the percent of effort which each of them contributes for the administrative support of the medical school.**

Not applicable.

**c. Indicate the term of appointment for department chairs, and the number of times it can be renewed.**

Five Year Term – Can be renewed once

**d. Briefly describe how and how often the performance of chairs is reviewed.**

At the end of Fourth Year – Review Committee is set and a report is provided to the dean with the results of their work. This report indicates areas of strengths and areas that may need development.

**e. Briefly describe the budgetary authority of department chairs, and the sources of funding for departmental budgets.**

The budgetary authority of department chairs (Discipline Chairs) essentially falls into two categories: (1) the discipline operating budgets; and (2) the discipline funds themselves.

#### **Discipline Operating Budgets**

Each of the ten disciplines has an operating budget from which the main costs of operating the discipline are drawn. The source of this funding is the annual Provincial Government grant which is received through the Department of Health and Community Services. The operating budget includes all academic and administrative salaries, and associated benefits. These represent in excess of 80% of the operating budgets of each of the disciplines but the Chairs themselves exercise very little control over these costs. They are mainly negotiated wage settlements for the two main academic and administrative Collective Bargaining groups. Even though clinical faculty remain outside the MUNFA bargaining unit, their salaries and many of their benefits parallel those provided to bargaining unit members.

Much smaller budgetary allocations are provided for such items as:

- Office supplies
- Minor Equipment and Furniture
- Computers and supplies
- Office equipment repairs
- Telecommunications
- Faculty Travel
- Administrative Travel

#### **Discipline Funds**

The Discipline Chairs have much more flexibility with regard to the administration of these funds. The primary source of funds for the Discipline Funds are the annual discipline fund transfers that are done by MPA. Each disciplines fund share is determined by the pro-rata calculation of the partnership earnings of each particular discipline as a percentage of the total partnership earnings. A large discipline like the Discipline of Medicine could receive in excess of \$300,000 annually, a medium size like Pediatrics

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004 around \$100,000 and a smaller discipline like Radiology around \$25,000. Most recent figures available show a little over \$830,000 transferred in 2003 based on 2002 partnership earnings. Of course, 25% of the gross transfer is taxed back on a Discipline-by Discipline basis as a Dean's Tax that is necessary to meet operational requirements.

The Discipline Funds are intended to help facilitate clinical faculty development and they are very necessary to augment the limited operating funds that are available for this purpose. Chairs have the discretionary authority to approve conferences, seminars, workshops, paper and poster presentations and in some cases even books, specialized computer hardware/software that directly relate to the professional development objective. These funds are an essential component to the successful operation of the Faculty of Medicine.

A final source of funds for many clinicians who are actively engaged in research are clinical trials and/or general research funding from various external sources.

### **Division of Basic Medical Science and Division of Community Health**

The major difference between these two important divisions of our Faculty of Medicine and the clinical disciplines already mentioned is their lack of access to any Discipline Funds. The somewhat obvious reason for this is that the Discipline Funds flow directly from the practice plan which is comprised of full-time clinical faculty members with the M.D. designation eligible to practice medicine in the Province. By contrast, our Divisions of Basic Medical Science and Community Health contain PhD. faculty members who are specialized scientists, not physicians eligible to practice medicine. Our Basic Medical Science Division is comprised of full-time PhD. faculty members whose specialty areas may include: anatomy, biochemistry, biophysics, cell sciences, genetics, immunology, microbiology, molecular biology, neuroscience, pathology, pharmacology, and physiology. The Division of Community Health specializes in such areas as: epidemiology/public health, dietary/nutrition, social/behavioral sciences, health services and health statistics.

Both of these divisions rely fairly heavily on the operating budget afforded to them through the Provincial Government grant. As already mentioned, this funding source pays for all full-time faculty/staff salaries and all associated employee benefits. Salaries/benefits are driven by signed Collective Agreements with MUNFA to which these full-time faculty members belong, and CUPE which represents the administrative staff. Again, salaries/benefits represent about 80% of the costs flowing through the operating budgets of these two divisions meaning the respective Associate Deans of both Basic Medical Science and Community Health have little control over how these funds are spent. Any discretionary control they do have rests somewhat in the way in which certain non-salary expenses are incurred. These are referred to above and need not be repeated here.

Another consideration that has arisen in the past number of years are the "start-up costs" associated with new faculty recruitment in both of these areas. We are competing with several other Faculties of Medicine in Canada, the U.S. and elsewhere when we are engaged in recruiting new basic scientists to our Division of Basic Medical Science, and Community Health faculty members to that Division. For Basic Science, there is an expectation that we can provide start-up costs to cover the costs of new research equipment and supplies to help get their labs established once they are on site here at Memorial. The benchmark currently in place is that our Faculty of Medicine provides \$75,000 over two years to new full-time faculty recruits to help get their labs up and running. Recruits to the Division of Community Health do not have the same type of infrastructural needs associated with a wet lab as a lot of their research just use computers with specialized software packages. Community Health recruits are usually provided with a one-time sum of \$6,000 to cover any start-up costs they may incur. We recognize the crucial importance of these funds to our newly recruited faculty members and have met all commitments in this area from a

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
variety of miscellaneous funding sources. While not specifically funded in our operating grant  
from government, we have asked for specific incremental funding in our 2005-06 budget  
submission.

Many faculty members in both of these Divisions are actively engaged in contract research which  
does represent a major source of funding for their research endeavors.

G. Peddigrew

2005-01-03

*See also Part A, item (a.) in this section of the database.*

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004 IS-12. **A medical school should be a component of a university offering other graduate and professional degree programs that contribute to the academic environment of the medical school.**

*There should be regular and formal review of all graduate and professional programs in which medical school faculty participate, to foster adherence to high standards of quality in education, research, and scholarship, and to facilitate the progress and achievement of the trainees.*

**a. Numbers of students enrolled in graduate training programs in basic sciences, and postgraduate fellows receiving further training:**

Our faculty of Medicine has three Divisions and graduate training is offered in all three: Community Health, Clinical Epidemiology and Basic Biomedical. There are eight graduate training programs as shown in the table (Fall 2004). We offer graduate diplomas in Community Health and Clinical Epidemiology and MSc and PhD in all three divisions. The Applied Health Services Research program is currently only offered as a MSc.

<b>Department or Program</b>	<b>Diploma Students</b>	<b>Master's Students</b>	<b>Doctoral Students</b>	<b>Postdoctoral Fellows</b>
Applied Health Services Research	na	7		na
Cancer	na	13		8
Cardiovascular-Renal Sciences	na	3		1
Clinical Epidemiology	14	30		9
Community Health	8	22		6
Human Genetics	na	13		2
Immunology	na	10	8	2
Neuroscience	na	9		8

**b. Average time to complete:**

Master's degree	3 yr 8 mo
Doctoral degree	6 yr 1 mo

**c. Describe any procedures to provide systematic review or evaluation of graduate education programs in the basic sciences. Note any major successes or significant problems identified in the most recent such review.**

**i. Procedures for systematic review or evaluation of the graduate education program.**

Our graduate program includes **Basic Biomedical** (Cancer, Cardiovascular-Renal, Human Genetics, Immunology and Neurosciences), **Community Health** (including Applied Health Service Research) and **Clinical Epidemiology**. Each of the eight program groups has a program coordinator and the coordinators, Associate Deans of Basic Medical Science and Community Health, a Graduate Student representative and the Assistant Dean form the Graduate Studies Committee Advisory to the Dean of Medicine. The committee meets monthly from Sept. until May to review policies and procedures as

they apply to the graduate programs, review and approve courses and program changes, funding and student travel. The Assistant Dean and one other member of the Graduate Studies Committee attend the monthly meetings of the School of Graduate Studies Academic Council. Currently two graduate students from the Faculty of Medicine also sit on this committee.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
Each graduate student has a supervisor and supervisory committee (two additional faculty members). The Assistant Dean presents an information session for each of the program groups once a year. This includes a description of who to approach with concerns regarding program of study or supervision.

## **ii. Successes**

We have had a steady increase in the number of students entering and graduating from our programs over the past few years. Our students are competitive for funding from national councils (2 NSERC, 2 CIHR, 1 CIHR-MD/PhD, 2 CIHR-Colorectal Cancer Group, 1 NSERC, 2 NSERC Canada Graduate Studentships, 1 CIHR Canada Graduate Studentships, 1 CIHR-CNIB, 1 Canadian Liver Foundation, 1 Canadian Blood Services), local agencies (1 NLCAHR) and University fellowships (1-Hatcher, 10 Fellowships).

At the Spring 2004 convocation one of our students (Dr. Blue Lake) received the Governor General's Medal for his PhD dissertation, one of our students (Dr. Susan Moore) received the University Medal for Excellence in a Thesis Based Masters Program.

MacLean's Magazine recently highlighted one of our recent PhD students (Dr. Geoff Biernaskie) in their "Best and the Brightest" report on university stars.

The Faculty of Medicine provides financial support for Graduate Students to travel to conferences to make presentations of their research.

Memorial University is part of the Atlantic Regional Training Centre in Applied Health Services Research, which also includes the University of New Brunswick and Dalhousie University. The three Universities offer a Masters of Applied Health Services Research. The Canadian Health Services Research Foundation (CHSRF) and the Canadian Institutes of Health Research (CIHR) provided funding for the development of this centre and annual support of the graduate students.

The Summer Program in Neuroscience (SPIN) was a program for graduate students and post-doctoral fellows in the Canadian Stroke Network. It was funded by the New Frontiers Program (CIHR and Heart and Stroke Foundation) and the National Centres of Excellence Canadian Stroke Network. The students in the program came from across Canada. The program was organized locally by one of the senior Canada Research Chairs Dr. Dale Corbett. The program received very high reviews from participants and faculty across the country.

We have an MD/PhD program, which is overseen by the MD/PhD program committee, co-directed by the Assistant Deans of Undergraduate Medical Education and Research and Graduate Studies. We currently have two students in this program, both supported by external funding.

## **iii. Challenges**

The three programs (Basic Biomedical, Community Health and Clinical Epidemiology) have slightly different philosophies and experiences with training graduate students, and accommodating these different philosophies is sometimes a challenge. Funding has been an area in which we have discussions. The policy for our faculty is that all full time students will receive a minimum stipend of \$12,000 pa. This policy is reviewed annually. Financial support is available from several sources for graduate students; however, this is always a challenge. In addition, financial support for student travel to attend conferences is limited and as our program grows there is less financial support for each student to travel. We have a number of graduate students who are either registered as undergraduate medical students or

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

residents. It is sometimes difficult for these students to complete a research project and written thesis. In these cases students are encouraged to complete the graduate program at the diploma level.

*See also Part A, item (b.) in this section of the database.*

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
 IS-12-A. **Medical students should learn in clinical environments where graduate and continuing medical education programs are present.**

*In order to link medical student education to the later stages of the medical education continuum, medical students should spend time in settings where graduate and continuing medical education programs are present. It is expected that medical students will participate, where appropriate, in the activities associated with these programs. The graduate and continuing medical education programs at training sites where medical students are located should be accredited by the appropriate accrediting bodies.*

**a. For each clinical facility where one or more students take a required core clerkship (except ambulatory, community-based sites), mark a (+) if residents in ACGME-accredited programs are involved in medical student education in that clerkship; place a (-) for any clerkships offered where there is no resident participation.**

Site	Fam. Med.	Int. Med.	Ob/Gyn	Pediatrics	Psychiatry	Surgery
General Hospital		+		+		+
L.A. Miller Centre		+		+		+
Janeway Child & Women's Health Centre		+		+		+
St. Clare's Mercy Hospital			+		+	
Waterford Hospital					+	
James Paton Memorial Hospital			+/-		+/-	
Central Newfoundland Regional Hospital			+/-		+/-	
Western Memorial Regional Hospital			+/-		+/-	
Saint John Regional Hospital, NB			-		+	
Moncton, NB					+	

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**b. Number of house officers that are the responsibility of your faculty, by training program (Note: If the school operates geographically separate clinical campuses, provide a separate table for each campus):**

<b>Training Program</b>	<b>PGY-1</b>	<b>Total Residents</b>	<b>Clinical Fellows (ACGME-approved programs)</b>	<b>Clinical Fellows (Non-ACGME approved programs)</b>
Family Medicine	17	19	N/A	N/A
Anesthesia		4		16
Diagnostic Radiology		3		11
Internal Medicine		8		14
Neurology		1		4
Nephrology			3	
Pediatrics		6		17
Pathology (Anatomical)			8	
Psychiatry		8		19
General Surgery		4		16
Orthopedic Surgery		2		10
Obstetrics/Gynecology		3		12
	56		149	

**c. Describe the mechanism used for oversight and coordination of graduate medical education, including evaluation and allocation of training positions. Note any programs currently on probation, as well as programs being substantially expanded or reduced in size. Identify any programs experiencing difficulty in filling positions.** The Postgraduate Medical Education Committee is responsible for the development and implementation of policies governing postgraduate medical education and does so under the following terms of reference:

1. Development and implementation of policies governing postgraduate medical training in affiliated hospitals.
2. Dissemination of information and discussion of matters of mutual interest.
3. Setting up policy on admission requirements.
4. Defining overall objectives of programs, approval of new programs and evaluation of existing programs.
5. Establishing and monitoring the evaluation process in the postgraduate training programs.
6. Establishment and maintenance of an appeals mechanism.
7. Assessing annual residency and fellowship training positions in the light of long-term manpower needs in the Province in consultation with the Department of Health.
8. Communication between faculty and affiliated hospitals.
9. Liaison with the Professional Association of Interns and Residents in Newfoundland on matters of mutual interest.
10. Discussion and resolution of interdisciplinary matters.

11. Receipt and discussion of appropriate items of Royal College, College of Family Physicians and Newfoundland Medical Board policy.
12. To promote research and critical appraisal activities in resident training programs.
13. To report to Faculty Council at intervals.

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

14. To administer and coordinate programs to meet special needs in the Province as deemed appropriate by the Faculty.

15. Committee membership to include: Assistant Dean of Postgraduate Medical Studies as Chair, residency directors of all Royal College and College of Family Physicians programs, a representative of the Health Care Corporation of St. John's, a community hospital representative, three PAIRN representatives and the postgraduate counselor. Non-voting ex-officio members will include the Administrative Assistant in Postgraduate Medical Education and the chairs of the clinical disciplines. The chairs of clinical disciplines will be invited to at least two meetings per year and will receive minutes of all meetings.

Under the 2004 Accreditation it was recommended that all programs receive FULL Approval, with the exception of Psychiatry and Obstetrics and Gynecology who were recommended 'Intent to Withdraw' and 'Provisional', respectively. However, it should be noted that the Faculty will appeal the status of Intent to Withdraw regarding the Psychiatry Program at the Accreditation Committee meeting to be held in January 2005. The outcome of the Royal College of Physicians and Surgeons of Canada (RCPSC) Accreditation meeting of January 21, 2005 was as follows: Internal Medicine (provisional), Obstetrics and Gynecology (provisional); Pediatrics (accredited); Psychiatry (provisional) and Surgery (accredited).

At present our programs are fully subscribed to, with optimum enrollment.

**d. If the medical school or its clinical affiliates are accredited by the ACCME to sponsor continuing medical education for physicians, indicate the program's current accreditation status, length of accreditation granted, and year of the next accreditation review.**

<b>Program Sponsor</b>	<b>Accred. Status</b>	<b>Length of Accred. Term</b>	<b>Year of Next Review</b>
CACMS via AFMS	Full June 2002	Unknown Expect 5 years	2007

**e. Describe how CME programs contribute to the education of medical students.**

All CME programs are advertised on the bulletin boards next to the 1<sup>st</sup> and 2<sup>nd</sup> year mailboxes. As well, a brochure is mailed to all 3<sup>rd</sup> and 4<sup>th</sup> year clerks. We provide up to six free seats for students for each CME offered.

There have been 212 contact hours provided to medical students during a 5 year period (Sept. 1999 – Sept. 2004).

*See also Part A, item (c.) in this section of the database.*

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004 IS-13. **The program of medical education leading to the MD degree must be conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars.**

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**Summarize institutional efforts or programs to address research ethics, scientific misconduct, conflicts of interest, and human subjects protection. Which administrative units oversee such programs, and who are their target audiences?**

Within the University Administration there are three levels of oversight of research ethics. The Vice President Research and International Affairs oversees the Office of Research and acts on behalf of the President to oversee the research activities of the University. Following the tri-council policy guidelines the President oversees directly the committees responsible for the ethical review of research involving human subjects. The Senate Committee on Research considers, reviews, and advises on the legal and moral implications of research activities. Research in the Faculty of Medicine involving humans or animals is required to be reviewed by either the Human Investigation Committee (HIC) or the Institutional Animal Care Committee (IACC). The Assistant Dean of the Office of Research and Graduate Studies oversees the operation of HIC, whereas the IACC answers to the VP Research directly. These two committees are described below.

Research involving human subjects follows the guidelines established by the “Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans” (TCPS) and research involving animals follows the guidelines established by the “Canadian Council on Animal Care” (CCAC). There are three human research ethics boards at the University: the Human Investigation Committee (HIC), the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and the Sir Wilfred Grenfell College Ethics Review Committee. Members of the Faculty of Medicine submit their research proposals to the HIC.

The HIC is co-chaired by two members of the Faculty of Medicine and consists of representatives from the Disciplines of Medicine, Divisions of Basic Medical Sciences and Community Health along with others, following the guidelines of the TCPS. A description of the HIC membership, policies and application forms is available at <http://www.med.mun.ca/hic/> ((Section I – Appendix 5)). The Assistant Dean of Research and Graduate Studies is the Dean of Medicine’s representative to this committee and is a member *ex officio*. It is the responsibility of the HIC to review and approve consent forms to be given to subjects participating in research studies. The Co-chairs of the HIC attend discipline meetings to present up-dates on HIC policies and procedures. Workshops involving Pharmaceutical sponsors are held to inform faculty, staff and trainees of HIC procedures and policies.

The “Policy Statement on Integrity in Scholarly Research” addresses issues of scientific misconduct (involving faculty, staff or trainees) and the policy descriptions are found at <http://www.mun.ca/research/resadmin/integrity%20.html>. ((Section I – Appendix 6))

Research studies involving human subjects in which there is a question of scientific misconduct is under the mandate of the HIC, which has the power to discontinue a research protocol.

Issues of Conflict of Interest are considered by the HIC. A description of the policy is given under question 20 of the HIC application ([www.med.mun.ca/hic/pages/guidelines.htm](http://www.med.mun.ca/hic/pages/guidelines.htm)) ((Section I – Appendix 7)). The HIC follows the guidelines of the Tri-Council Policy document and Conflict of Interest description for REB members is given at

[www.nserc.ca/programs/ethics/english/sec01.htm#E](http://www.nserc.ca/programs/ethics/english/sec01.htm#E) and for researchers is given at [www.nserc.ca/programs/ethics/english/sec04.htm](http://www.nserc.ca/programs/ethics/english/sec04.htm). ((Section I – Appendix 8))

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

The Animal Care Services oversees the research use of animals and has a mandate to provide and maintain healthy colonies of research animals, while implementing high facility standards as called for by the CCAC. Research involving animals is reviewed by the Institutional Animal Care Committee, which has three members from the Faculty of Medicine. Descriptions of these procedures are provided at <http://www.mun.ca/acs/guidelines.shtml>. ((Section I – Appendix 9)) Graduate students who do research on animals are required to take the Animal Care Services Seminar and Workshop Program on the care and handling of laboratory animals.

All graduate students are required to take GRIP: Graduate Research Integrity Program (<http://www.mun.ca/sgs/grip/>) ((Section I – Appendix 10)). This course was developed by the School of Graduate Studies and covers a number of topics of ethics, integrity in research and conflicts of interest. The Assistant Dean of Research and Graduate Studies is responsible for this program in the Faculty of Medicine.

*See also Part A, item (c.) in Section V of the database.*

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-14. **Students should have the opportunity to participate in research and other scholarly activities of the faculty.**

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**Briefly describe the opportunities for medical students to participate in research, including the times when students may do so, the general level of student involvement, and funding available for such activities.**

Students are encouraged to participate in research activities throughout their program. Research opportunities are provided formally and informally.

Summer research studentships are offered to first and second year students. All students who apply are funded to carry out research projects supervised by members of the faculty. Funding for these studentships is provided from internal and external sources.

**2002/03**

External funding

Leukemia Research Fund of Canada \$4,048

CIHR Professional Students Award \$4,048 X 2

Harvey Head Award \$2,600

Canadian Stroke Network \$5,000

(Note: LRF provides \$3,500, topped up by medicine to \$4,048. HH award provides \$2,000 topped up by medicine to \$2,600)

Internal funding

15 summer studentships @ \$2,600

Informal research projects were carried out throughout the year in a wide range of disciplines from history of medicine to orthopedics.

*See also Part A, item (d.) in this section of the database.*

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
IS-15. **All medical school faculty members should work closely together in teaching, research, and health care delivery.**

*Because the education of both medical students and graduate physicians requires an academic environment that provides close interaction among faculty members, those skilled in teaching and research in the basic sciences must maintain awareness of the relevance of their disciplines to clinical problems. Conversely, clinicians must maintain awareness of the contributions that basic sciences bring to the understanding of clinical problems. These reciprocal obligations emphasize the importance of collegiality among medical school faculty across disciplinary boundaries and throughout the continuum of medical education.*

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**a. Describe any research institutes or centers operating under the authority of the medical school. Do staff at such facilities hold faculty appointments in the school?**

Centres

1. The Faculty of Medicine has a Development Office (previously an Office of Marketing and Development for Health Science Research). The Development Office is managed by a Faculty Development Officer for Medicine. This position reports to the Dean of Medicine, and the Director of Memorial University's Office of Alumni Affairs and Development. The purpose of this position is to develop and implement strategies for fundraising for the Faculty of Medicine, to carry out donor relations, and stewardship for the Faculty of Medicine, and fundraising for the Medical Research Foundation. The Development Officer is also in charge of class fundraising for the annual Medical class reunion. Office of Alumni Affairs and Development  
**([http://www.med.mun.ca/alumni/pages/development\\_team.htm](http://www.med.mun.ca/alumni/pages/development_team.htm)) ((Section I – Appendix 11))**
2. The Patient Research Centre (**<http://www.med.mun.ca/prc/default.asp?page=home>**) ((Section I – Appendix 12)) and Research project Approval Committee **<http://www.med.mun.ca/prc/default.asp?project=rpacapp>**) ((Section I – Appendix 12)) at the Health Care Corporation of St. John's, Health Sciences site, is responsible for liaising with industry to link research projects with appropriate investigators; hiring and training research nurses; contract negotiation and budgeting; facilitation of ethics review and access to community research networks. The Patient Research Centre is directed by a Manager who does not hold a faculty appointment. Faculty members engaged in clinical trial research are affiliated with the Patient Research Centre. The Patient Research Centre is not directly under the authority of the medical school but faculty members are engaged in clinical trial activities.
3. The Clinical Epidemiology Unit focuses on research training for graduate students (residents and non-residents) in the areas of health services, clinical epidemiology and health care delivery. This was established by members of the Discipline of Medicine and has faculty who oversee the program. The faculty research interests are in clinical trials, health care delivery research and patient related research in nephrology, obstetrics and genetic renal disease.
4. The Health Research Unit (**[www.med.mun.ca/hru/](http://www.med.mun.ca/hru/)**)((Section I – Appendix 13)) was formed by faculty in the Division of Community Health. The objectives of this unit are to improve the health of the community through

studies in health promotion, health protection, health status, health studies,  
health services, health programs and disease

## LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

prevention. The unit makes available the professional skills and expertise in the Division of Community Health to communities, organizations, government and industry to design and conduct research in the field of population health. The Manager of the Health Research Unit does not hold a faculty appointment.

5. The Newfoundland and Labrador Centre for Applied Health Research (<http://www.nlcahr.mun.ca/>) ((Section I – Appendix 14)) is engaged in research on applied health issues (health matters of relevance to public policy and clinical decision-making). The Centre provides funding for Project and Development Grants; MSc, PhD and Post-Doctoral Fellowships; and Visiting Lectureships. The Director of the Newfoundland and Labrador Centre for Applied Health Services is a faculty member in the Department of Political Science with a cross-appointment to the faculty of Medicine.
6. The Newfoundland Cancer Treatment and Research Foundation (NCTRF) provides small seed grants for faculty research in the area of cancer including projects of clinical, basic biomedical and community interest. The NCTRF is managed by a director who does not have a faculty appointment but the research board overseeing the review of small research grants includes faculty members. (<http://www.nctrf.nf.ca/>) ((Section I – Appendix 15))
7. The Telehealth and Educational Technology Resource Agency (TETRA, <http://www.med.mun.ca/telemed/>) ((Section I – Appendix 16)) is involved in telemedicine activities across the province providing programming for health and educational activities to 161 communities and eight videoconferencing sites. The Director of TETRA is a member of the Faculty of Medicine.
8. The Centre for Collaborative Health Professional Education (CCHPE, <http://www.med.mun.ca/cchpe/>) ((Section I – Appendix 17)) is engaged in research and development projects in evaluation of technology-mediated learning systems in health professional education, evaluation of health professional education programs, design and development of Internet-based health professional education programs, literature synthesis studies of rural medical education and interprofessional education initiatives and outcomes, survey research of learning technology use in health professional education and attitudes towards interprofessional education. The Director holds a Faculty appointment.
9. Office of Professional Development (<http://www.med.mun.ca/pdmed/>) ((Section I – Appendix 18)) provides continuing medical education and clinical skills assessment and training with a history of serving the information and continuing education needs of health professionals who work in rural areas. The Director does not hold a faculty appointment but the Office works continuously with faculty.

The Office of Professional Development has established a Division of Research and Development which is led by a Director of Research and Development. The current Director is appointed as an Assistant Professor (Medical Education) with the Faculty of Medicine and is also appointed as Co-Director of the Centre for Collaborative Health Professional Education. The Division of Research and Development has been established to promote and foster research, development and innovation in the areas of lifelong learning in medicine, continuing medical education and professional development. An Advisory Committee comprising representatives from the following divisions of the Faculty of Medicine, and chaired by the Director, enables interdisciplinary collaborative approaches to research and development activities in the areas of CME and professional development in medicine.

- Faculty Member, Discipline of Community Health

- Faculty Member, Discipline of Family Medicine
- Faculty Member, Clinical Discipline
- Faculty Member, Clinical Epidemiology Unit

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004  
The Research and Development division will serve to establish and lead interdisciplinary research project teams in the implementation of research activities and projects.

10. The Centre for Offshore and Remote Medicine (MEDICOR, <http://www.med.mun.ca/medicor/> ((Section I – Appendix 19)) conducts research and development projects related to all health aspects of offshore oil, marine, diving and space industries, as well as other industries involved with remote operations, environmental stresses or hazards. MEDICOR directs research efforts to the medical concerns of industries operating in remote locations. The director is a faculty member.
11. The Human Investigation Committee (HIC, <http://www.med.mun.ca/hic/>) ((Section I – Appendix 7)) is an ethics review board, appointed by the President of the University and conducting review of protocols for research involving human subjects for the Faculty of Medicine and Schools of Nursing and Pharmacy, the Health Care Corporation of St. John's and NCTRF. The co-chairs of this committee are both members of the Faculty of Medicine.
12. The Medical Education and Laboratory Support Services (MELSS) is a core research support unit of the Faculty of Medicine, including a full service electron microscope, clinical biopsy service, histology laboratory, flow cytometry unit, confocal digital imagery centre. In addition, MELSS coordinates the Clinical Skills Teaching space which is used for clinical teaching and assessment, clinical trials research, genetic counseling and other patient encounter activities. The manager of MELSS does not hold a faculty appointment.
13. The Animal Care Services (<http://www.mun.ca/acs/>) ((Section I – Appendix 9)) operates under the authority of the University Vice President Research with a Manager (non-faculty) who resides in the Health Science Complex. The Animal Care Centre in the Health Sciences Centre has 19,000 sq feet for the housing, feeding and general care of research animals.

**b. Describe any organized activities or events that promote faculty collaboration in the achievement of the school's missions, such as integrated teaching efforts, collaborative research projects or programs, or faculty development activities.**

Activities and Events related to Research

Opportunities for collaboration are provided through seminars, journal clubs, invited speakers program, special lectureships, Faculty-wide lunchtime seminar series and the Scientific Research Days. The seminar series are open to all faculty members and offer the opportunity for researchers across disciplines to become aware of research in the Faculty. The Scientific Days are an annual fall event, in which faculty members and trainees have the opportunity to present posters and seminars on their research. A Keynote Speaker is invited to give a presentation at this event.

1. Weekly Seminar-Journal Club: All eight graduate programs offer a weekly seminar-journal club and invited speakers program. These are open to all faculty but are specifically designed for students and faculty in one of the eight programs of study: Applied Health Service, Cardiovascular and Renal Sciences, Clinical Epidemiology, Community Health, Human Genetics, Immunology and Neuroscience. Each of these programs involves faculty from a range of disciplines and therefore provides the opportunity for interdisciplinary interactions.
2. Invited Speakers Program  
([http://www.med.mun.ca/graduate/pages/invited\\_speakers.htm](http://www.med.mun.ca/graduate/pages/invited_speakers.htm)) ((Section I – Appendix 20)): The Faculty of Medicine provide up to \$5000, annually, for invited speakers to each of the research programs. These presentations are available to all faculty and speakers of interest to more than one program are encouraged.



## LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

### 3. Special Lectureships. The Faculty of Medicine hosts a series of special lectureships:

- À John G. Williams Lecture is a joint program in Neuroscience, Neurology and Psychiatry.
- À Nigel Rusted Lecture on the History of Surgery.
- À The Hawkins Lecture on Health Sciences Research.
- À The Albert and Margaret Cox Lectureship in Medical Education.
- À The Dr. John Hoenig Lecture in Psychiatry
- À The Gairdner Lectureship

### 4. Tuesday Lunchtime Seminars

[http://www.med.mun.ca/graduate/pages/tuesday\\_seminars.htm](http://www.med.mun.ca/graduate/pages/tuesday_seminars.htm)) ((Section I – Appendix 21)). During the academic year there is a monthly lunchtime seminar series, in which members of faculty present research findings to their colleagues. This is attended by faculty, students, trainees, and staff and is hosted by the Assistant Dean of Research and Graduate Studies. Each semester a presentation is given in each of the divisional areas: Clinical, Community Health and Basic Biomedical.

### 5. Scientific Days (<http://www.med.mun.ca/pdmed/scientificdays/>) ((Section I – Appendix 22)) is a two day event, held in the fall. Faculty and students are invited to present current research and make a brief presentation. On the first day of this event the Gairdner lecture is given and on the second day a presentation is given by a prominent researcher in health sciences research. This is a well attended and highly informative two days covering a range of health sciences research in clinical, community health and basic biomedical. ((Information from Research and Graduate Studies Office))

The Centre for Collaborative Health Professional Education was established in September 1999 by the Directors of the Schools of Nursing, Pharmacy, Social Work and the Deans of the Faculties of Education and Medicine. This new Centre was created in response to:

- a growing emphasis on interdisciplinary health care creating the need for development of interprofessional educational programs;
- the requirement of professional accrediting bodies for rigorous educational program evaluation;
- the need to incorporate and evaluate educational innovations such as computer-based and distance education, problem-based learning, and simulated patients/clients;
- recognition that education is a legitimate and valuable academic focus.

### **Interprofessional Education I**

The Interprofessional Education I program involves junior health profession students from Medicine, Nursing, Pharmacy and Social Work. The goals of this program are to enhance students' self-directed learning and evidence-based practice skills; enhance students' perspectives and understanding of other health care professionals and demonstrate collaborative working relationships within a group learning environment; and improve students' understanding of the concepts of interdisciplinary teamwork in primary care and healthy communities. Using small group learning, these health profession students collaborate in assessing and addressing learning issues which arise from a community-based case study dealing with interdisciplinary teamwork in primary health care. The small groups are expected to use community resources, subject experts and computer databases to gather the information necessary to prepare an interdisciplinary approach to the case study issues. The small groups are also expected to present an overview of their interdisciplinary approach to a representative from a health advocacy agency.

### **Interprofessional Education II**

The primary aim of this interprofessional education program is to enhance students' awareness of interdisciplinary approaches to caring for persons living with HIV/AIDS. The objectives of the program

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

are to foster commitment to interdisciplinary collaboration; enhance effective team work skills through cooperation and the sharing of information; increase awareness of the roles and responsibilities of each profession; and develop a shared philosophy of patient care and management. The students are assigned to small learning groups and are expected to collaborate in designing an interdisciplinary healthcare plan for a patient with HIV/AIDS. The students are also presented with a Standardized Patient (SP) scenario in which they are responsible for meeting as a team with an SP and planning an interdisciplinary healthcare team approach. Another significant initiative has been the development of a **Graduate Diploma in Post-Secondary Studies (Health Professional Education)**. The graduate diploma in health professional education is designed to enhance health professionals' abilities as educators and leaders in educational program design, development, evaluation and administration. The diploma is intended for educators and educational leaders of formal and informal post-secondary health professional education programs and is a collaborative program of the Centre for Collaborative Health Professional Education and the Faculty of Education. A core course in the diploma program is **ED 6806: Interprofessional Education in the Health Professions**. The Interprofessional Education in the Health Professions course is intended to introduce health professional educators to the philosophies, theory, principles and methods underlying the design and delivery of interprofessional education programs for the health professions. It addresses a key issue confronting health professional schools and educators as our health care system undergoes significant change, that being a growing emphasis on interdisciplinary health care.

Another objective of the Centre for Collaborative Health Professional Education is to stimulate and support collaborative research in health professional education. The Centres Scholars decided in 1999 to hold a series of research seminars and journal club meetings each semester. The seminar/journal club series raises awareness that health professional education is a scholarly field with an extensive literature and well-developed research methods. It also serves to raise awareness of different teaching perspectives and approaches among the various disciplines and fosters interdisciplinary collaboration between health professional educators. The following series was offered during the spring and fall terms, 2001: ((**Information from Centre for Collaborative Health Professional Education**)).

LCME Medical Education Database 2004-05 I. Institutional Setting Academic Year 2004

<b>Presenter</b>	<b>Topic</b>
Dr. Vernon Curran	Applying a Responsive Evaluation Approach in Medical Education
Dr. Carole Orchard	Conceptual Framework for Collaborative Professional Practice
Dr. Penny Hansen	Using Research Expertise to Improve Teaching and Learning
Dr. Vernon Curran	Constructivist Learning Approaches
Dr. Janet Fitzpatrick and Mr. Gerry Mugford	Integrating Technology into Continuing Health Professional Education
Dr. William Kennedy and Ms. Karen McGrath	Decentralization of Health and Community Services
Mr. Normand Dumoulin	Canadian Joint Faculties of Pharmacy Initiatives on Student=s Professionalism and Evidence-Based Medicine
Ms. Bonnie James	Medical Students= Career Preferences
Dr. Marilyn Hammick	Interprofessional Education, Evidence and Evaluation: towards transparency and transformation
Dr. Alice Collins	How Can Action Research be Applied to Practice?
Dr. Vernon Curran	Humanistic vs. Behaviouristic Philosophies in Health Professional Education: Can there be a balance?
Dr. Carole Orchard	Professional Socialization with and among the Health Disciplines
Dr. Ann Colbroune	So you say we work as teams. Do our students learn about it?
Ms. Madge Pottle	Use of Standardized Patients for Teaching
Dr. Cheri Bethune	Educational Assessment on the Day in Family Violence

**((Information from the Centre for Collaborative Health Professional Education Office))**

END OF SECTION I

# Self Study

Faculty of Medicine  
Pre-Accreditation Institutional Self-Study  
Summary Report 2005

1

## INTRODUCTION

### Previous Accreditation

The last full accreditation took place in 1998 with a Limited Survey in 2000. The main concern in 1998 and the reason for the limited survey in 2000 was that a new curriculum was in the process of being implemented. The class starting in 1996 and graduating in 2000 was the first class to have experienced only the new curriculum.

The 1998 Accreditation Site Visit team identified the following concerns:

- The administrative structure for curriculum management was cumbersome and problematic.  
The survey team in 2000 found the administration much improved and concluded “the program is now in compliance with the standard on integrated institutional responsibility for the curriculum”.  
*Due to sabbatical leaves and other complications the Undergraduate Medical Studies committee was not functioning for some years. As of Fall 2003 this has been corrected.*
- Evaluation of educational program effectiveness was inadequate.  
A Program Evaluation Committee had been set up and was functioning by 2000. The limited survey team concluded that this “should facilitate improved curricular evaluation”.

*The chair of this committee also stepped down and went on sabbatical leave and the committee was not functioning for several years. As of Fall 2003 this has been corrected.*

- Better defined mechanisms to foster and evaluate critical thinking, self-directed learning and independent study should be developed.

The 2000 team did not comment on this aspect.

*In reviewing the database we found that our curriculum now meets standards ED-5 and ED-6 regarding self-directed, independent study and skill of critical judgment.*

- The level of research productivity and the number of graduate students were low.

The 2000 team found some improvement but were still concerned, in particular about lack of research among clinical faculty.

2

*Since 1998 the number of graduate students has nearly doubled and the funding from external grants has tripled. The number of clinical trials has increased. The low number of clinical faculty who find time to do research is still a concern.*

- Financial aid for students is inadequate.

The 2000 team found some improvement but still concluded “there remains an urgent need for enhanced financial assistance”.

*While the medical school meets standard MS-23 regarding financial aid and management counseling, the debt load for graduating students is still very high in comparison to students graduating from other Canadian medical schools. The dean has hired a Faculty Development Officer tasked to increase donations to the Faculty of Medicine. Student scholarships and bursaries will be a major focus of this initiative.*

- There are no apparent plans for performance based evaluation in the third and fourth years of the new curriculum and none exist at present.

The 2000 team was provided with data that showed the students' skills were evaluated in several ways and the team had no major concerns about the issue.

*There are one or more ITERs in five of the six core rotations. The exception is rural family medicine where there are preceptor comments instead. As well there is an OSCE in internal medicine. Internal medicine has been using national board standardized exams for a number of years and it is understood that all clerkship disciplines will be introducing these exams.*

- The appeals process is unclear.

The 2000 team concluded that “the appeals process, although complex, seems to work reasonably well, and appears to ensure due process for students”.

*All entries in the Calendar have been updated (will go before Senate February 2005), this may further improve understanding of the appeals process.*

- The 2000 survey team had serious concerns that the dean of the Faculty of Medicine was not a member of the Board of the Health Care Corporation of St. John's.

*The dean is now a member of the Board of the HCCSJ. Several Health Boards are in the process of being combined into the Eastern Regional Integrated Health Authority. The dean has requested ex officio status.*

3

- The financial information provided by the Faculty Administration did not allow complete understanding of the total budget, although the team did not list this as a concern. *The 2000 team were given additional information and found this and discussions*

*To have “satisfactorily resolved the concerns raised in the 1998 report”.*

## The Self-Study

Planning for the Institutional Self-Study started in January 2003 because it was anticipated that the accreditation team would visit in the fall of 2004. The database forms were sent out to the various disciplines, divisions and administrative units in mid-April with a request that the forms be returned by June 1<sup>st</sup>. The chairs of the Task Force subcommittees were in place by late August; they were left free to find their own committee members if they so chose but were asked to have at least one medical student on each committee (APPENDIX 1). In July, 2003, we were notified that the accreditation visit would take place in May 2005; for that reason we decided to leave the independent student survey until the fall of 2004.

The Task Force subcommittee reports were submitted (at least in draft form) by the end of 2003; they are referred to in the following as PASS report 1-11. The exception was the report on finance; the chair could not continue due to sickness and a new chair took over in April, 2004. A summary list of “Strengths, Weaknesses and Recommendations” was compiled from the reports and submitted to the members of the Faculty Council Executive in January 2004. The Executive discussed the recommendations and, where possible, came up with an action plan to implement the recommendations. These recommendations will be referred to in the document and are listed in the back along with the action taken.

Faculty Council, at its monthly meetings, has been informed about progress in the self-study.

The self-study process was not initially part of institutional planning but with a new dean taking office in April, 2004, the self-study findings are being used in institutional planning.

The database was updated in the Fall of 2004 and, unless otherwise stated, all data presented are for the year 2004. The medical students did their independent survey in December, 2004, and a draft version of the students' report was made available to the Task Force on February, 2005. This left no time for the relevant subcommittees to include comments/recommendations about the student survey in their own reports. We anticipate that a list of "actions taken" will be ready by the time of the accreditation team's visit.

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## I INSTITUTIONAL SETTING

### The Province

The province of Newfoundland and Labrador became Canada's 10<sup>th</sup> province in 1949; prior to that it was a British Dominion. It is the most easterly province. While the province has an area of 153 000 sq. miles (same size as California), its population is only approximately half a million people. Over half the population lives on the south-east Avalon Peninsula and most in or close to St. John's, the capital city. Most other settlements are small and dispersed, primarily along the coasts. The closure of the cod fishery in 1992 put 20,000 people out of work over night. The fishery has not recovered. We have the highest rate of unemployment in the country (16.7% in 2003); this has led to significant out-migration of younger people.

Health, education and social welfare services are under provincial jurisdiction but largely funded by the federal Canada Health Transfer program (CHT) and Canada Social Transfer program (CST). In 2003-04 the province received 798 million in equalization payments, 420 million in CHT and 240 million in CST payments.

### The University

Memorial University College was established in 1925 and became a university in 1949 after the Dominion of Newfoundland became

a Canadian province. The present campus in St. John's opened in 1961 and a second campus opened in Corner Brook in 1975. The University has six Faculties – Arts, Science, Education, Medicine, Engineering, and Business Administration, and six Schools – Graduate Studies, Nursing, Pharmacy, Physical Education, Recreation and Athletics, Social Work, Music, and Continuing Education. Memorial University of Newfoundland (MUN) is the largest university east of Montreal with a total enrollment of 16,020 at the St. John's campus (Fall 2004 data).

### The Medical School

The school was established in 1968 and graduated its first class in 1973. The class size is currently 60 students. Three factors distinguish Memorial's Faculty from other Faculties of Medicine in Canada: (1) the Faculty is funded directly from the provincial government rather than the university; (2) it has a close relationship with the provincial Department of Health and Social Services, which ensures scrutiny of and also support for the social contract of the Medical School; and (3) the Faculty has three Divisions: Basic Medical Sciences, Community Health, and a Division of Clinical Sciences.

#### A. Governance and Administration

1. *Describe how institutional priorities are set. If planning is a regular institutional activity, discuss how it has facilitated accomplishment of the school's academic purpose, research prospects, and goals of the clinical enterprise.*

The Mission and Objectives of the Faculty of Medicine was reviewed in 1996 by the members of the Self-Study Task Force committee preparing for accreditation in 1998.

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The finalized version of the Mission and Objectives was accepted by Faculty Council in November, 1996. Institutional planning occurs at many levels; there are monthly meetings of the Resource Management Committee consisting of the dean, clinical chairs, assistant and associate deans. There are monthly meetings of Faculty Council (September to June) and of Faculty Council

Executive. For some time Faculty Council had not been functioning effectively in that it has been difficult to reach a quorum (**recommendation #1**). That has not been a problem the last year. Faculty retreats are usually held at least once in five years, most recently in November 2002 with approximately 130 attendees (FA-14, IS-1-A). There are monthly meetings of the Division of Basic Medical Sciences and Division of Community Health as well as most of the disciplines (Radiology for example only has 6 meetings a year). The dean meets individually at least monthly with discipline chairs, assistant and associate deans. (IS-1, PASS report 1).

*2. Evaluate the role of governance structure in the administrative functioning of the medical school. Is the governance structure appropriate for an institution of this size and characteristics? Describe any situations that require review by or approval of the school's governing board prior to taking action.*

The internal organization of the Faculty of Medicine is a matrix system and there is general consensus that this system works well for an organization of our size. The University Senate oversees budgetary and curricular issues and the Board of Regents is ultimately responsible for faculty and administrative appointments. (IS-7, PASS report 1)

*3. Evaluate the relationship of the medical school to the university and clinical affiliates with respect to:*

*a. Effectiveness of the interactions between medical school administration and university administration.*

The relationship between the Faculty of Medicine and the rest of the University is generally good. This statement is based on interviews with the Vice-President (Academic), several deans (Science, Engineering, Arts), and directors of schools (Nursing, Pharmacy, Social Work). (PASS report 1)

*b. Cohesiveness of the leadership among medical school administration, health sciences center administration, and the administration of major clinical affiliates.*

The PASS Task Force identified this as an area of particular strength. The Health Care Corporation of St. John's (HCCSJ) is the major clinical affiliate of the Faculty of Medicine. The relationship between the medical school and the HCCSJ is felt to be exemplary. Communication between the dean and senior management of HCCSJ is continuous, open and cordial. The Dean now sits on the Board of the HCCSJ. Feedback from other Regional Health Boards indicated no dissatisfaction with the governance structure. However, signed affiliation agreements with most of the regional Health Boards, need to be completed (**recommendation #2**). (ER-9, ER-10, PASS report 1).

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*4. Assess the organizational stability of the medical school administration (dean, dean's staff). Has personnel turnover affected medical school planning or operations? Are the number and types of medical school administrators (assistant/associate deans, other dean's staff) appropriate for efficient and effective medical school administration?*

There is general satisfaction with the stability of the medical school administration. There has been some concern with timeliness in filling clinical chair positions; as well, position descriptions for administrators (associate deans and clinical chairs) should be reviewed and updated (**recommendation #3**). (IS-11, PASS report 1). This process has been started.

#### B. Academic Environment

*5. Evaluate the graduate program(s) in basic sciences, including involved departments, numbers and quality of graduate students, quality of coursework, adequacy of financial support, and overall contribution to the missions and goals of the medical school.*

*Describe the mechanisms for reviewing the quality of the graduate programs in basic sciences and comment on the effectiveness.*

Within the Faculty of Medicine, there are graduate programs in 8 areas of specialization: applied health services research, human genetics, clinical epidemiology, cancer, cardiovascular-renal, community health, immunology, and neuroscience. Except for

applied health services research all programs offer M.Sc. and Ph.D. degrees. Currently there are approximately 180 graduate students; this represents a doubling since the last accreditation. In order for a student to be accepted into a graduate program a faculty member has to agree to supervise the student. We are turning qualified students away simply because a supervisor can not be found (in the immunology program approximately 40% of those who actually submit an application are accepted). All graduate programs require the students write a thesis and this prepares the student to take on independent research initiatives. A significant proportion of our graduates go on to further studies at the doctoral or post-doctoral level. Informal feedback suggests that they do well at the next level. A high proportion of the students are from the province and tend to remain in the province after graduation to take important positions within the health care sector.

The faculty-to-student ratio is high ( 1:1.6 in basic sciences) which allows for more informal mentoring and teaching than if the student was in a larger program. Classes are small, as few as two students in a course, and this makes it awkward for the students to fill out formal student-evaluation forms. However, the students' performance in subsequent levels reflects positively on the quality of the courses. At the Spring 2004 convocation one of our students received the Governor General's Medal for his Ph.D. dissertation and another of our students received the University medal for Excellence in a Thesis Based Masters program (IS-12). A formal review of graduate programs took place in the early '90s and it may be time to review these programs again (**recommendation #4**). (IS-12, PASS report 2).

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To be accepted into a full-time graduate program in the Faculty of Medicine, students must have funding in place through a scholarship or a studentship. These provide a minimum of \$12,500 for a M.Sc. student (two years) and \$14,000 for a Ph.D. student

(four years) annually. More funding is needed because a) few students finish their program within the two or four years and b) we do turn away high quality students because funding cannot be found for them. Finding sufficient office and lab space for the students has also become a major problem (**recommendations #5 and #8**). There is no doubt the students make a major contribution to the research carried out here, both directly and by presenting their work at conferences. A significant number publish their work in peer-reviewed journals. Some graduate students also teach medical students in small-group or lab sessions. (IS-12, PASS report 2)

*6. Evaluate the impact of residency training programs and continuing medical education activities on the education of medical students. Describe any anticipated changes in graduate medical education programs (numbers of residents, shifts in sites used for training) that may affect the education of medical students.*

There are residents at almost all the sites where students do their core rotations except for family medicine in rural areas (ER-8). There are also residents in anesthesia, radiology and laboratory medicine for a total of 205 (56 PGY1 and 149 others). Residents are directly involved in teaching in the pre-clerkship clinical skills course. Many of the residency programs have classroom sessions on a regular basis that involve both undergraduate and post-graduate trainees. Medical students may attend weekly grand rounds, faculty research seminars and journal clubs. Medical students may also attend specific continuing health education activities organized by the Office of Professional Development. According to results from a questionnaire organized by the task force subcommittee and from the graduate questionnaire the majority of students felt that the interaction with the post-graduate students was either somewhat or very important to their learning. (IS-12-A, IS-15, ER-8, PASS report 2).

*7. Evaluate the research activities of the faculty (areas of emphasis, level of commitment, quality, quantity) in the context of the mission and goals of the medical school.*

Most of the research conducted within the Faculty of Medicine falls within (1) basic sciences, (2) community health, and (3) clinical sciences. Overall there has been a substantial increase in the research productivity of the Faculty since 1998. The number of full time faculty has increased from 165 to 185; the amount from research grants has increased from \$2.9 million to \$6.1 million (2002-03) and to \$9.8 million for 2003-04. The number of clinical trials has also increased. In the Division of Community Health all full-time faculty have external funding. In Division of Basic Medical Sciences 25 of 35 have external funding. An important problem is the low start-up funds offered to faculty in basic sciences; this makes recruitment difficult. The research capacity in the Division of Clinical Sciences is restricted by low faculty numbers combined with the demands of clinical work (**recommendations #7**). (FA-2, FA-5, PASS report 2 with its appendix 3).

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*8. Assess the adequacy of resources (equipment, space, graduate students) for research. Evaluate the amount of intramural support for research and the level of assistance available to faculty members in securing extramural support.*

Space is a problem in Basic Medical Sciences; while 7 faculty in that division will retire in the next 5 years, five of them have already given up their lab space. Thus finding lab space for new recruits will be difficult. In the Division of Community Health space is expected to become a problem in the near future when additional faculty are hired. Space was considered adequate by the chairs of the clinical disciplines with the exception of internal medicine. Plans have been developed for new research space to be

shared with the HCCSJ, and are at final funding approval with the government.

Equipment for research appears to be adequate. A plan for future replacement of standard shared equipment is needed. Up to \$5,000 per applicant have been available previously from an R & D committee. This committee has stopped functioning due to lack of funds. Negotiations are being finalized with the university for an increased share of the Indirect Costs Program of Industry Canada

Sources of intramural funding are very limited. There are 2 annual awards of \$25,000 each. Information regarding upcoming external funding competitions is widely circulated on a regular basis (**recommendations #5 and #7**, PASS report 2).

*9. Assess the impact of research activities on the education of medical students, including opportunities for medical students to participate in research.*

When accepted into medical school the majority of students have at least a bachelor's degree. Many of them have therefore been involved with research either as honors students, masters or Ph.D. students. There are opportunities to participate in research in addition to what is part of curriculum (taught in Community Health). There are a number of 8 – 12 week funded summer research positions with faculty members; projects are generally in clinical areas or in basic sciences. The number of students who take advantage of this opportunity varies from year to year but the average is perhaps 15 per year. Summer research opportunities are a minimum of 8 weeks; this is a major problem since summer vacation is also only 8 weeks. The assistant dean of research and graduate studies provides a list of research opportunities and with the assistance of the UGME office arranges for an annual presentation to each of the classes. There are two students enrolled in a MD-Ph.D. program. (**recommendation #16**). (IS-14).

The Centre for Collaborative Health Professional Education was established in 1999 by the directors of the schools of nursing, pharmacy, social work and the deans of faculties of education and medicine. A major reason for creating this Centre was the growing emphasis on interdisciplinary health care creating the need for development of interdisciplinary educational programs. Other forms for collaboration occur particularly in the pre-clerkship courses. These courses are usually taught as a collaborative effort of several faculty members, sometimes from the same division or discipline, sometimes from several areas e.g. Community Health and Family Medicine. (IS-A-d, PASS report 2, Required Course Forms)

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## II EDUCATIONAL PROGRAM FOR THE MD DEGREE

### A. Educational Objectives

*1. Indicate the level of understanding of the objectives for the educational program among administrators, faculty members, students, and others in the medical education community. Do the objectives serve as effective guides for educational program planning, and for student and program evaluation?*

The curriculum was revised in 1995 and implemented with the class entering in 1996. The Mission Statement and Objectives of the Faculty of Medicine are given as Appendix 3, the Objectives of the Institutional Undergraduate Medical education as Appendix 4. The medical school was a member of the Medical School Objectives Project consortium and our objectives encompass the MSOP objectives (ED-1-A). These objectives serve as guides for the UGMS committee, the Clerkship and Clerkship Discipline committees, and the Pre-Clerkship and course committees. There are educational objectives for all components of the educational program. However, there did not appear to be annual reviews of course objectives by these committees (**recommendation #12**). As well, broad objectives of the curriculum were not well understood

by faculty members. Interviews with students indicated that the individual course objectives were used and found to be a helpful guide for study in the pre-clerkship years, particularly in first year. Use of objectives by students in the clerkship seemed to be infrequent. There was general agreement that the student evaluation, quizzes and exams, reflected the objectives reasonably well. (ED-1, ED-1-A, ED-26, ED-46, ED-47, PASS report 3).

*2. Comment on the extent to which school-wide educational objectives are linked to physician competencies expected by the medical profession and the public. Summarize results from any associated outcome measures that demonstrate how well students are being prepared for the next stage of their training.*

Our medical school was a member of the AAMC's Medical School Objectives Projects and the objectives outlines are met in the curriculum. Performance in national exams is the best illustration of how students have progressed in developing the competencies that are expected of physicians. In Part I of the MCC exam, the class performance is slightly below the Canadian average, in Part II they perform above the national average. Internal Medicine has been using national standardized exams for a number of years and it is understood that all clerkship disciplines will be introducing these exams. (ED-1-A, ED-26, ED-48)

*3. Evaluate the adequacy of patient resources and clinical settings for achieving the school's clinical objectives.*

Concern has been raised by the students that in a number of circumstances, standardized patients are taking over the role of faculty in clinical skills teaching (**recommendation #6, #11 and #12**). It is difficult to judge how frequently this may occur, however, the Pre-Clerkship committee recognizes that this does occur and the extent of this is being reviewed. (ED-2, Pass report #3). A well functioning standardized patient program has

now been developed. With the rapid discharge of hospital patients, standardized patients provide more appropriate and consistent learning function, particularly for the first year clinical skills course.

## B. Structure of the Educational Program

*4. Delineate the mechanisms ensuring that the educational program provides a general professional education that prepares students for all career options in medicine. Cite relevant outcomes indicating success in that preparation.*

The MD program at Memorial University of Newfoundland consists of 159 weeks of instruction that prepare students to enter postgraduate training for all medical career options. Many different teaching methods are used in presenting the curriculum (lectures, labs, small group sessions, case-based discussions); one of the more recent introductions is the interdisciplinary case discussion program in Community Health where medical students work with students from nursing, pharmacy and social work. As mentioned previously, our graduates perform well on the MCCQE Part II exam which would suggest that they are well prepared for their chosen profession. The curriculum change implemented in 1996 ensures that students have experienced the six core rotations before they have to choose a residency program. As well, the school has adopted MedCAREERS as the career-advising program (MS-19). Whether the change in curriculum structure and the career-advising program are partly responsible for the change in choice of residency programs that has occurred is unknown but in 1997 45% of our graduates chose Family Medicine, 40% chose Internal Medicine and 15% chose Surgery. In 2002 the percentages were 19, 55 and 14 respectively, with 12% choosing other programs. Neither the medical students nor patient population in this province is as culturally diverse as in larger cities but our students' experience closely reflects the diversity of the province. However, native people constitute a significant percentage of patients in

Labrador and there are increasing numbers of francophone patients from St. Pierre et Miquelon. There may be a need for increasing the cultural competence of students, particularly for caring for visible minorities. The clinical skills program now includes refugee content and clinical learning. A multicultural day will be added to develop broader interest and medical student electives to the developing world will be encouraged (**recommendation #14**). (ED-4, ED-5, ED-6-7, ED-12, ED-21, ED-22, Required Course and Clerkship forms).

*5. Discuss the types and sufficiency of educational activities to promote self-directed learning and development of the skills and habits of lifelong learning.*

Problem-based situations, critical appraisal courses, case-based studies, and clinical caseload are utilized throughout the four years of medical school. Students are required to prepare for each of these sessions based on objectives provided. Each student is expected and challenged to participate in the tutorial sessions. Preparation requires independent study on the part of the student. It is through this learning process that students develop their individual learning styles and needs. The case-based approach is a prominent feature of most subjects and is also reflected in many of the exams.

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In the clerkship the students begin with case studies which are used to refine required learning skills including those for lifelong learning. Case studies are quickly replaced by clinical situations where the clinical clerk is a member of the healthcare team providing day to day care for real patients. They gain practical experience that further reinforces their clinical skills and judgment. As a team member they realize their individual responsibility for obtaining quality information and the development of an accurate diagnosis.

The school has also provided the resources required for self-directed learning. The library at the Health Sciences Centre provides an extensive array of educational and reference material. Courses are provided in first year on how to do library searches and Medline searches. Computer access is readily available and continues to improve. Faculty are easily contacted in person or by email. In the clinical setting information is sought from other members of the healthcare team.

Lifelong learning is a strength in the undergraduate and postgraduate programs of Memorial's medical school program. Committee members, who were graduates of Memorial, confirmed this in their own professional careers. Continuing Medical Education is another example of lifelong learning. (ED-5, PASS report 4)

*6. Evaluate the adequacy of the system for ensuring consistency of educational quality and of student evaluation when students learn at alternative sites within a course or clerkship.*

Clerkships are offered at hospitals of the St. John's Health Care Corporation, other sites in Newfoundland and Labrador, and in New Brunswick. The Grand Falls site is used for some internal medicine and pediatrics teaching, Corner Brook site for pediatrics and Gander for surgery teaching. Up to sixteen family medicine sites are used to deliver practical experience in rural family medicine. Rural sites are also arranged for first and second year students. Each of these sites must meet the standards set for clinical experience, teaching/learning, accommodations and access to educational resources. All sites are appraised annually through student evaluation and by a visit from a representative of the medical school (but see **recommendation #22**, ER-6, ED-8).

The Undergraduate Medical Education Office arranges all clerkships in Moncton and Saint John, New Brunswick. The discipline clerkship coordinators retain full responsibility for the

educational experience and evaluation of the students. All sites have teleconferencing facilities and an increasing number have videoconferencing. Evaluation forms are standardized across the sites. All students sit the same exams, irrespective of educational site. (ED-8, PASS report 4).

*7. Comment on how well all content areas required for accreditation are addressed in the curriculum. Note any evidence supporting the adequacy of content coverage for such topics.*

Early in the medical curriculum students learn basic statistical and fundamental research principles of evidence based medicine. They learn to apply these in the Integrated Study

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of Disease-1 (ISD-1) and ISD-2 courses which guide the student through the core medicine disciplines using a case based, problem based learning format with content experts as tutors.

The clinical years utilize an apprenticeship model with students under the tutelage of senior staff and residents. Evidence based medicine is learned at the bedside. Students learn the efficient use of clinical tests and technology balanced with clinical acumen to achieve the best evidence-based patient outcomes. Team rounds incorporate an interdisciplinary approach which helps sensitize the students to the social and practical needs of the patient. The “Back to Basics” course serves to refresh the student in the core physiologic and biochemical principles as well as prepare them for practical aspects of internship. (ED-5, ED-10, ED-11, ED-12, ED-13, PASS report 4).

*8. Evaluate the workload and balance between education and service in the clinical years. Do students receive sufficient formal teaching during the clerkship? Assess the balance between inpatient and ambulatory teaching and the appropriateness of the teaching sites used for required clinical experiences.*

The committee felt that there is an appropriate balance between education and service in the clinical years. There would appear to be sufficient formal teaching during clinical clerkship with the possible exception of surgery and there is a broad exposure to both ambulatory and inpatient populations with both venues used as teaching sites.

Clinical instruction covers all organ systems and includes important aspects of prevention, acute, chronic, rehabilitative and end-of-life care. However, greater emphasis could be placed on prevention and rehabilitation [both are given less than 5 hours of formal teaching (ED-10)]. Although end-of-life care issues are given more than 50 hrs of formal teaching the students still felt that it was not covered well enough (**recommendation #15**). A one-week course in palliative care and a one-week course in geriatrics have been implemented. Almost all clinical rotations include experience in primary care. The general medicine component may not include an outpatient experience but always includes an emergency room clinical experience. The medical school has the use of appropriate resources for the clinical education of medical students. Two concerns were raised and have been addressed by changing the scheduling of rotations: (i) The volume of pediatric inpatient experience at the Janeway is variable throughout the year and may at times be low; however, focus on outpatient clinics may be more appropriate for learning. (ii) The volume of psychiatric inpatients is sometimes not sufficient to meet the demand when a large number of clerks are assigned to the psychiatry rotation. Clerk-specific academic teaching generally occurs during all rotations. During out-of-town rotations teleconferencing, and recently WebCT programs, have been used effectively to communicate with the central site. Based on information from the Required Clerkship Forms it would appear that there are no clerk-specific teaching rounds in the Orthopedic rotation. As well, the formal schedule of General Surgery teaching at the Health Sciences site is not adhered to rigorously. In a questionnaire

distributed to fourth year students by Sub-committee 5 (PASS report 5 [II.C.9]) “students felt staff were often too busy to give adequate academic bedside teaching” (**recommendation #21**). (ED-13, ED-14, ED-16, ER-6, PASS report 4).

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### C. Teaching and Evaluation

*9. Comment on the adequacy of the supervision of medical students during required clinical experiences. Discuss the effectiveness of efforts to ensure that all individuals who participate in teaching, including resident physicians and volunteer faculty members, are prepared for their teaching responsibilities.*

Faculty development programs on teaching skills are available to residents and faculty. Based on results of an in-depth discussion with 5 fourth year students and from a questionnaire specifically designed to look at supervision and teacher preparedness (sent to fourth year students) it was found that clinical instruction in the preclinical years was well organized and structured. Teachers were well prepared and taught using guidelines outlined in a clinical skills manual. The only weakness identified was that the students felt they were not tested on academic medicine during these sessions. In the clerkship the students felt that teaching and supervision of skills was less well structured than in the pre-clinical years but occurred on a daily basis during clinical responsibilities. The students, who all had done electives at other institutions, felt they had better clinical exposure than their counterparts at other medical schools for a variety of reasons: a) high staff to student ratio allows students excellent exposure to procedures that are staff supervised, b) students are often the only ones to examine, assess and plan patient management before clinicians attend to patients, c) students are given a significant amount of responsibility, d) students felt their clinical skills were well developed because they see and take care of a high volume of patients. The weaknesses identified were that a) students

sometimes felt they provided too much service, b) their clinical responsibilities outweighed their academic ones (no academic time was truly protected) and c) staff were often too busy to give adequate academic bedside teaching (**recommendation #21**). (PAAS report 5, ED-24, ED-25).

*10. Evaluate the adequacy of methods used to evaluate student attainment of the objectives of the educational program. How appropriate is the mix of testing and evaluation methods? Do students receive sufficient formative assessment in addition to summative evaluations? Discuss the timeliness of performance feedback to students in the preclinical and clinical years.*

Undergraduate students undergo testing throughout the four years of medical school. The curriculum content, modes of teaching and prescribed methods of learning are designed to satisfy the “Undergraduate Medical Education Objectives”. Each course is the responsibility of a course committee comprised of a representative group of the tutors and a student representative. The committee develops course objectives which are in accord with the overall undergraduate medical education objectives. Exam questions are reviewed (student rep excused) to ensure they meet the objectives of the course and are appropriate for the level of training of the students. Students offer anonymous feedback about the course including written evaluations. The results of the course evaluation are discussed at a post examination meeting of the course committee which ideally, but not always, includes the student representative. As a consequence of this meeting, changes may be recommended regarding the course objectives, textbook or course evaluation.

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The mix of testing and assessment approaches are determined by the course objectives, methods of tutoring and prescribed learning activities. In basic science courses lab examinations, written

assignments, short answer and multiple choice questions are frequently utilized. Community Health in addition uses preceptor observation during rural community placement. During clerkship, clinical skills, ethical interpersonal behavior with patients and health professionals, clinical procedures' skills and patient management are deemed important for student evaluation. In all courses multiple choice questions are used to test problem-solving ability and capacity to employ factual knowledge in novel situations.

In pre-clerkship any course that runs for more than three weeks has at least one midterm in addition to a final exam. These evaluations serve as formative assessment. During clerkship, there is variability between the courses with regard to formative assessment, but summative evaluation is implemented in all courses.

Most students remarked that they received their examination scores and evaluation reports in a timely manner. During clerkship, the students held the view that the UGME office should ensure that, where appropriate, both the staff-person and the resident participate in completing the ITER (**recommendation # 20**). (Required Course and Clerkship forms, ED-26, ED-27, ED-28, ED-29, ED-30, ED-31, ED-32, PASS report 5)

*11. Describe the system for ensuring that students have acquired the core clinical skills specified in the school's educational program objectives. Evaluate its adequacy.*

Pre-clerkship evaluation includes self-evaluation of videotaped interviews, assignments, exposure to OSCE-type questions and verbal feedback from facilitators. In second year there are two OSCE's , tutor evaluations and witnessed history and physical. During clerkship, there is ITER evaluation in each rotation, completion of a passbook containing a list of mandatory and desired procedures, an OSCE in internal medicine and frequently witnessed history and physicals. The overall delivery of clinical

skills is strong. The evaluation of students at the pre-clerkship level may be stronger than in the clerkship. The concern was raised that the ITER's are known to be highly subjective and may be biased by personality (both of student and faculty) over skills (see also recommendation #20). (Required course and clerkship forms, PASS report 5)

#### D. Curriculum Management

*12. Assess the adequacy of mechanisms for managing the curriculum and ensuring a coherent and coordinated curriculum. Does the curriculum as a whole and its component parts undergo regular, systemic review? Are there sufficient resources (for the associate dean and the curriculum committee) to support the management of the curriculum?*

While the mechanisms for managing the curriculum and ensuring a coherent and coordinated curriculum are in place, there has been a breakdown in the effectiveness of these mechanisms. The UGMS committee has only met occasionally since 2000. As of Fall 2003 this has been corrected. This has meant that there has been no systematic review of the curriculum for nearly four years. As well, the Program Evaluation

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committee has not been fully functioning for nearly four years, this has also been corrected as of Fall 2003. At the clerkship level, the committee structure is reasonably effective with regular structured meetings and a process to review courses on a two year cycle with discussions and appropriate actions. However, often implementation of changes may be limited at the level of discipline committees such that the majority of the work is done by the discipline coordinator. The Pre-clerkship committee is composed of the chairs of the eight courses, representing a total of 22 components/subjects (for example Integrated Study of Disease II has 10 individual subjects that are represented by a single individual). There appears to be little communication between the members of the Pre-clerkship committee and the subject chairs which they represent. Teaching sites outside St. John's are visited

regularly by a representative for the School but perhaps not often enough (**recommendation #22**).

Administrative support staff in the undergraduate office are working to full capacity to manage *status quo*. An identified need for a major overhaul of the exam question data bank is impeded by the lack of personnel. A newly established position of instructional designer for WebCT development will be an important resource to facilitate curriculum delivery. The School is slowly moving towards more distributive learning as a teaching mechanism although this has not yet reached the serious planning stage and more faculty need to understand what is involved. (ED-33, ED-35, ED-37, PASS report 3).

*13. Judge the effectiveness of curriculum planning at your institution. Describe efforts to ensure that there is appropriate participation in planning and that resources needed to carry out the plans will be available. How effective are the procedures to rectify any problems identified in the curriculum, and in individual courses and clerkships? Describe and evaluate.*

All individual components of the curriculum have a process for feedback. There was evidence of systematic review of this feedback by the clerkship committee but not by the pre-clerkship committee. However, in many cases it was reviewed by the individual subject committees. The number of students who fill out the subject evaluations is variable and sometimes the number is so low that the evaluations are meaningless. Subject committees generally meet at least once before each course and again afterwards to review student performance and the students' evaluation of the course. These are usually relatively informal meetings, without minutes being circulated to the UGMS office. (ED-35, ED-37, PASS report 3)

#### E. Evaluation of Program Effectiveness

*15. Assess the quality of your graduates. Describe the evidence indicating that institutional objectives are being achieved by your students.*

The Program Evaluation Committee was established by UGMS in response to the 1998 accreditation. This committee implemented various forms for feedback from students (pre-clerk and clerkship) about the courses and rotations. The committee also helps to implement focus groups where problems with certain subjects are identified. Currently

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the committee is reviewing all procedures and forms for course evaluation, as well as investigating options for feedback on faculty teaching. One of the prime indicators of how well we prepare our students is their performance on the MCCQE Part I and Part II, usually written after graduating (May of 4<sup>th</sup> year, Part I) and in October of the following year (Part II). In Part I the average score for our graduates is slightly below the national average. The students graduating in 2000 were the first students who had followed the new curriculum through all four years; there was no significant change in how they scored on the Part I exam as compared to the students following the old curriculum (the scores from 1997 to 2004 are 94, 97, 95, 94, 94, 94, 96 and 95% of the national average). Except for the class of 2004 our students best performance is in Clinical Reasoning Skills; this may reflect the low student to staff ratio in the core rotations. The failure rate in Part I is low (one or two students).

The results of the Part II exam, for MUN graduates who stayed at MUN as residents, have been above the national average for a number of years. For both 2001 and 2002 they scored highest of all graduates, for 2003 they ranked second. For those graduates who did their residency outside of Memorial, MUN graduates scored close to the national average.

Although the lower scores on MCCQE Part I are a concern the overall performance on the two exams would suggest that our students meet the institutional objectives (**recommendation #13**). (ED-46, ED-47, ED-48).

16. *Discuss how information about your students and graduates is used to evaluate and improve the educational program.*

It is the function of the Program Evaluation committee to submit evaluations and recommendations to the UGMS committee which will discuss and initiate appropriate changes to the curriculum. However, since the Program Evaluation committee had not been functioning for some time changes to the curriculum have been made as problems have arisen. (ED-33, f). The committee has now been fully functioning for over a year.

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### III MEDICAL STUDENTS

#### A. Admissions

1. *Critically review the process and selection of medical students, and evaluate the results of that process. Is the size of the applicant pool appropriate for the established class size, both in terms of number and quality? How do you validate your selection criteria?*

The class size has remained at 60 for a number of years. In the year 2000

New Brunswick reintroduced funding for 10 reserved seats for applicants from that province. In 2001 Prince Edward Island began funding for 2 reserved seats. Thus the class is made up of 40 reserved seats for Newfoundland students, 10 for New Brunswick students and 2 for Prince Edward Island students; the remaining 8 seats are not reserved and can be filled with students from any of the previously mentioned provinces, from the rest of Canada or from outside Canada.

The total number of applicants has been approximately 650 for the past 5 years. The number of Newfoundland applicants has clustered around 170 and the number of New Brunswick applicants is around 70. Applications from other parts of Canada have fluctuated between 350 and 490 in the past 6 years, while the non-Canadian pool has declined from a high of 76 in 1997 to 25 in 2003. This may be a reflection of the fact that with the return of New Brunswick funding for seats for its students the medical school is no longer recruiting actively in the U.S. Thus at least 1 in

4 of Newfoundland applicants are accepted, 1 in 7 of New Brunswick applicants and a maximum of 1 in 45 of other Canadian applicants are accepted. Presently there are no seats reserved for selective bursary students and all seats in the various categories are filled through a transparent single selection process. There is no form of positive selection with regard to ethnic, aboriginal or rural background.

The Faculty of Medicine Calendar has a clear and explicit description of the process that an applicant needs to go through in order to apply for admission to the medical school. This information is also available on the admissions website. For the Newfoundland pool all applicants with an average of 80% or greater and a MCAT score of 24 or greater are automatically granted an interview. The remaining approximately 66% of applicants who do not meet this requirement are reviewed by the admissions committee to assess whether they should be granted an interview. These applications are reviewed and through a process outlined in the “Objectives and Administrative Procedures of the Admissions Committee” the remainder of the Newfoundland candidates are selected for interview.

The assistant dean and admissions officer review the applications from the other four pools and select for interview those candidates they deem most suitable. After the candidates have been interviewed each member of the admissions committee reviews and scores the completed file for each candidate. Applicants are ranked according to these 15 scores. The committee then meets to finalize the selection for admittance based on the ranking of the applicants. About 225 interviews are conducted each year.

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Although the MCAT scores for the Newfoundland applicant pool as well as for the successful Newfoundland applicants are below the national averages our graduates score reasonably well on the MCCQE Part I exam (our students’ mean score has stayed at around 95% of the national mean score) and very well on the Part

II exam. We therefore feel that the quality and the size of the applicant pool is appropriate (MS-3, MS-4, MS-5, MS-6, ED-48).

*2. Evaluate the number of students of all types (medical students, residents, visiting medical students, graduate students in basic sciences, etc.) in relation to the constellation of resources available for teaching (number of faculty members, space, clinical facilities, patients, educational resources, student services, etc.).*

With 240 medical students, 205 residents, approximately 180 graduate students and 185 full-time faculty, we have a student teacher ratio of 3:1. With the additional 400 part-time faculty teaching is generally well covered. A third of the part-time faculty are paid a stipend and many part-time faculty function in teaching roles comparable to full-time faculty in many other medical schools. This happens to such a degree that students often do not distinguish between who is part-time and who is full-time faculty. There is still the problem of standardized patients taking over the role of faculty in clinical skills teaching (recommendation #6).

Concern has been raised regarding the number of patients available in pediatrics and psychiatry but has been addressed by making changes to the number of students at each site at a given time and a stronger focus on outpatients. There is some variability from year to year with respect to clinical sites, particularly for rural family medicine where a site may not be used in a given year if a preceptor cannot be found. The number of fellowships/stipends available for both medical students and graduate students is low (recommendation #8 and #19). Insufficient space, particularly in basic sciences, is also getting to be a problem (recommendation #5). (MS-24, PASS report 6, PASS report 7).

*3. Describe your goals for gender, racial, cultural, and economic diversity of students. How well have they been accomplished? Are there student support programs and professional role models appropriate for the school's diversity goals?*

The school does not have stated goals regarding gender, racial, cultural, and economic diversity of its student population and these issues are not taken into account in consideration for admission.

However, a major problem remains in that no satisfactory method has been developed to select candidates to achieve the desired mix of students choosing a career in rural practice in the province. Despite the clear objective, as stated in the mission statement of the medical school, failure to match the perceived need for rural based physicians with graduates who see this as an appropriate career path is a perennial problem. The students are exposed to rural physicians as role models during the 2 weeks of rural medicine in each of first and second year, and at least 4 weeks of rural Family Medicine in clerkship. The “Med Quest” program brings high school students (favoring rural students) to the medical school for one week. The students spend time with health

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care providers and shadow them; it is hoped that this exposure will foster an interest in health care careers, including medicine.

The difficulty in recruiting a stable rural medical work force for the future is likely to be impacted by the current admissions profile. Although a specific requirement for admission is an undergraduate degree with/and two courses in English the great majority of applicants still seem to consider a science degree necessary for medical school application. In recent years there has been a steady increase in female applicants as well as successful female admissions. In 2001 20% of male applicants were successful while 32% of female applicants were successful for the 44 Newfoundland positions (**recommendation #17**). (MS-8).

*4. Evaluate whether the acceptance of transfer students, or visiting students in the school’s affiliated teaching hospitals, affects the educational program of regular students (i.e., in the context of competition with the school’s own students for available resources, patients, educational venues, etc.).*

Transfers from other medical schools are rarely accepted. When it occurs, transfer is to the first year of medical studies. The student must meet the admission criteria at the time of application and the transfer is then considered by the UGME office. However, the school accepts up to 4 students from the International Medical

University of Malaysia. The students enter in second year of the pre-clerkship; these students affect the educational program in a positive way by adding to the cultural diversity of the class. (MS-13).

### B Student Services

*5. Comment on the levels of student attrition and academic difficulty in relation to your school's admission requirements, academic counseling efforts, and remediation programs. How effective are counseling and remediation systems?*

No students withdrew from the program in the 2003-04 academic year. Sixty-one of 62 entering students graduated in 2003. There is an impression that every effort is made to accommodate students who are having academic difficulties. This has resulted in some comments that "weak students are not asked to leave". In most cases a student will be allowed to re-sit a failed exam; the decision to allow this rests with the UGMS committee. When allowed to re-sit an exam the student will usually perform well enough to pass. The majority of students who experience academic difficulty typically continue to do so after remediation has been taken; they will successfully continue their education but their performance remains in the lower half of the class.

A comprehensive array of counseling services (academic, personal and financial) is available through the Office of Student Affairs and the University Counseling Centre. Services and provisions are made for students with disabilities. MedCAREERS is a comprehensive career counseling program. Graduating students consistently rate the

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services provided through these programs and Office of Student Affairs as positive. (MS-18, MS-34).

*6. Analyze the pattern of career choice among your recent graduates. Is the pattern congruent with your school's mission and goals? Evaluate the system of career counseling, residency preparation, and the selection of elective courses.*

Recent graduate surveys would indicate that the vast majority of students are not choosing either family medicine or service in under-serviced communities. Because these two areas are of particular concern for this province, they should be the focus for the medical school. Of the graduating class of 1997, 45% chose Family Medicine; of the graduates of 2002 only 19% chose Family Medicine (**recommendation #18**). Students are generally positive about career counseling services but these services (MedCAREERS) have not been in place long enough to evaluate their impact on residency choices.

Electives may be carried out at previously approved sites, or a request may be made to use a new site. All electives in LCME/CACMS accredited institutions are approved. Evaluation of the quality of the experience is carried out through student reports. Student performance is evaluated by the site preceptor. Students are reasonably well prepared for residency as supported by the fact that they have experienced the six core rotations before choosing their residency area and that they perform very well on the MCCQE Part II exam. (MS-19, MS-20, PASS report 5 and 7).

*7. Evaluate the level of tuition and fees in relation to the size of graduates' accumulated debt, and to the level of financial aid needed and available. What is the school doing to minimize student indebtedness? Comment on the effectiveness of the debt counseling programs.*

Tuition is among the lowest in the country for Canadian students, although among the highest for foreign students. University policies govern tuition, deposits, refunds and other payments and these policies are easily accessible to students via the university calendar and web site or the university registrar's office. There is a part-time financial aid officer and regularly scheduled financial counseling through MD Management. However, apart from the initial meeting with a councilor, participation in financial counseling is not mandatory. The counseling covers the full range of financial issues, not just student debt. On average, 10 students in each class receive grants and scholarships from institutional

sources. The debt load for graduating students is still very high in comparison to that of students from other Canadian medical schools for both average indebtedness (\$84,650 versus \$56,732) and the percentage with educational debt greater than \$100,00 (40% versus 15%). Part of this may be due to our success at admitting students who come from more average rather than high income backgrounds. A recent study by 2 students, which included all classes, indicated that debt and expected salary will have an influence on career choice and location of practice. The province has an economically diverse population. While not discriminatory in the admissions process, the potential for financial indebtedness for disadvantaged students may be a deterrent for

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some prospective students (**recommendation #19**). (MS-23, MS-24, MS-25, PASS report 7).

8 *Evaluate the adequacy of student support in the following areas:*

- *Personal counseling and mental health services*
- *Preventive and therapeutic health services, including immunizations and health and disability insurance*
- *Education of students about bodily fluid exposure, needle stick policies, and other infectious and environmental hazards associated with learning in a patient care setting*

The Student Affairs Office has an open door policy which the student body appreciates and uses daily. Personal counseling is available from the manager of that office and also from the University Counseling Centre, class physicians, undergraduate counselor, psychiatrists and the NLMA professional assistance program.

Health services are available at the University but there is no established system within the Medical School regarding preventive and therapeutic health services. A Wellness committee has been established by the medical students to address prevention issues. Students are required to have various immunizations which are provided by the University Health Services. The cost of any

immunization not covered by a provincially funded program is charged to the student's account. Health and dental insurance is provided for Canadian students through the University. Health insurance is mandatory for foreign students. Disability insurance is optional and is available through OMA insurance as arranged by the School.

The clerkship manual contains information regarding health hazards and needle stick protocol. Students are required to follow relevant hospital policies and procedures related to infection control and environmental hazards in their clinical rotation sites. Students are informed of these policies during the clerkship preparation course (**recommendation #24**). (MS-26, MS-27, MS-28, MS-29, MS-30).

### C. The Learning Environment

9. *Comment on the effectiveness of school policies for addressing allegations of student mistreatment, and for educating the academic community about acceptable standards of conduct in the teacher-learner relationship.*

Students report that the small class size at Memorial creates a positive and less intimidating environment. There are few complaints of discrimination on the basis of race, sexual orientation or gender and most students are satisfied that administration fosters positive interaction among different racial and ethnic groups. University procedures for mistreatment and sexual harassment are posted on the website. The Faculty of Medicine has a mechanism for prompt handling of complaints of student mistreatment although students are encouraged to resolve problems informally if possible. Policies and procedures of the University govern the conduct of students and

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faculty. Psychological services are in place for students dealing with aftermath of harassment, discrimination, assault or misconduct while on campus, on work term or in the community. A significant proportion of graduating students (15-32%) report occasional or single incidents of personal mistreatment, usually in

the form of public humiliation. The most common sources of this mistreatment were faculty in clinical settings. The medical student complaint process is under review. Of the graduating class of 2003, 40% reported they were satisfied or very satisfied with the response to student problems, but this is below the national average of 55% (**recommendation #23, #14**). (MS-31, MS-32, PASS report 7).

*10. Evaluate the familiarity of students and course/clerkship directors with the school's standards and policies for student advancement, graduation, disciplinary action, appeal, and dismissal. Review the adequacy of systems for providing students with access to their records, and assuring the confidentiality of student records.*

Information regarding standards and policies is available to the students in the university calendar and various websites. Students and course/clerkship directors would be familiar with the requirements for advancement and graduation (what is required to pass a course is mentioned at the beginning of each course). Most students may not be aware of details of policies and procedures regarding disciplinary action, appeals, and dismissal but would know where to get the information.

Student records are maintained in a locked cabinet in the UGME office and access is restricted to the pre-clerkship and clerkship coordinators, the assistant dean of undergraduate medical studies, the manager of student affairs and the secretary responsible for filing information. Student may review their records at any time upon request to the UGME office. (MS-33, MS-34, MS-35, MS-36).

*11. Assess the adequacy and quality of student study space, lounge and relaxation areas, and personal storage facilities. Do they contribute to an environment conducive to learning?*

Medical students have access to the Health Science Library with extended evenings and weekend hours. Most students are satisfied with these resources. Medical students have access to the seminar rooms and some labs for study during evening hours. Most

graduating students indicated that they were satisfied or very satisfied with student study space. There is a student lounge with microwave, refrigerator, sink, TV, and plenty of comfortable seating. There are 140 lockers shared by 240 students; this is sufficient space since at any given time some students are off campus to do electives or rural visits or rotations. (MS-37, ER-4, ER-7, ER-12, PASS report 7, PASS report 11).

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#### IV. FACULTY

##### A. Number, Qualifications, and Functions

1 and 2. *Develop a composite assessment of the educational, research, and service activities of the divisions, in the context of the mission and goals of the medical school. (In addition to department-specific data in the Faculty section of the database, see also responses for standards IS-11 and IS-12 in Section I of the database, and departmental finances and facilities for standards ER-2 and ER-4 in Section V of the database.) Include the following areas in the assessment:*

- *Leadership (including stability of departmental chair positions.)*
- *Faculty (including numbers, experience and expertise), in total and by discipline.*
- *Finances.*
- *Space and facilities.*
- *Quality and quantity of teaching, research, and service.*
- *Involvement and success in graduate education.*

The Faculty of Medicine changed deans in 2004 with Dr. Ian Bowmer stepping down Dec. 31<sup>st</sup>, 2003 and Dr. James Rourke assuming the position in April, 2004. During the short interim, Dr. Sharon Peters, Vice Dean, was Acting Dean. Unfortunately, filling other senior positions (Associate Deans, Discipline Chairs) has not always been done in a timely manner (see recommendation #3).

We currently have 185 full-time faculty and 431 part-time faculty. Of the full-time faculty, 46 are full professors (17 in BMS, 2 in CH, and 27 in the clinical disciplines), 64 are associate professors (12 in BSM, 3 in CH, and 49 in the clinical disciplines), and 82 are assistant professors (7 in BSM, 4 in CH and 71 in the clinical disciplines). Of the part-time faculty, 283 are non-stipendiary and 148 are stipendiary (FA Part A and FA-2, a and b). Each of the smaller disciplines has at least one full professor (rank reflecting experience). The issue of critical numbers within the Faculty was considered during the most recent faculty retreat (Nov. 2002) with shortages being identified in all three divisions. Also noted is the important administrative contribution made to the Faculty by staff members, particularly in the UGME office and in the office of Student Affairs. Additionally, residents and graduate students make a significant contribution to the teaching of undergraduate medical students; they facilitate tutorials and lab demonstrations and residents provide a significant component of the clinical teaching of clerkship students. Many clerkship students have commented that their educational experience is highly dependent on resident instruction. (IS-12A, PASS report 2).

As mentioned earlier, the Faculty of Medicine has 3 divisions: Basic Medical Sciences, Community Health, and Division of Clinical Disciplines.

Division of Basic Medical Sciences. The number of faculty has dropped from 45 in 1991 to the current 36 (this includes 4 faculty who hold joint-appointments). Most (29) of the faculty within the division belong to one of the 4 research groups: cancer, cardiovascular,

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immunology, or neuroscience. Members of the division agree that each group requires 8-10 full-time members to function effectively. An increase in numbers would allow for a more reasonable distribution of teaching and administrative responsibilities, thereby allowing additional time for research and scholarly activity. The current strategy aims to increase faculty

numbers with at least two new full-time appointments per year for the next 5 years. We will lose 7 faculty members to retirement in the next 5 years; the dean has therefore requested funding for 6 BMS positions for the 2005-06 fiscal year.

**Community Health:** This division, though smaller than BMS and the clinical disciplines, is organized as a division with its own associate dean, recognizing its important role in the medical school. The medical humanities group including history of medicine, function closely with Community Health and will be more closely integrated to function as Division of Community Health and Humanities. There are currently 9 full-time faculty and 1 vacant position. The shortage makes it challenging for the division to meet existing teaching and service demands. This has necessitated hiring of retired faculty to deliver epidemiology courses and newly arrived junior faculty have been asked to coordinate courses and fulfill substantial administrative roles within the division.

**Clinical Disciplines:** The faculty continue to struggle to balance academic and clinical commitments. Numerous clinical faculty voiced concern about their clinical load compromising the time they have for research/scholarly activity, despite the provision of protected time for this. Even with these ongoing challenges, clinical research funding has increased in recent years. At least one clinical sub-discipline has developed a solution through alternate payment arrangements; this allows individual faculty members to pursue their respective interests while ensuring an appropriate balance of clinical, teaching and research activities by the discipline as a whole. The dean has requested funding for a chair in oncology and 16 additional clinical faculty positions.

It is generally perceived that an increase in faculty numbers would improve overall productivity within the Faculty of Medicine.

Current numbers are adequate for teaching and service responsibilities but compromise the time for scholarly activity. Many full-time and part-time faculty are involved with graduate teaching (see PASS report 2). We currently have 149 graduate

students, 22 diploma students (IS-12), 2 post doctoral fellows and 205 residents (**recommendation #6, #25, #9**). (FA-2, FA-6, IS-12).

As mentioned under Institutional Setting/Academic Environment, lack of wet-lab space in basic sciences is a problem as well as the below the Canadian average start-up funds for new faculty in that division (recommendations #5, #6, #7).

*3. Describe factors that facilitate and hinder recruitment and retention of faculty members at your institution. Is the current mix of faculty (gender, ethnicity) appropriate for the attainment of your institutional goals?*

Existing opportunities at other post-secondary/research institutions, combined with the universal shortage of trained professionals, may limit the number of qualified candidates

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applying for a given faculty position. Lack of adequate office/lab space and insufficient start-up funds have repeatedly been cited as having a negative impact on the recruitment of new faculty members (see recommendations #5 and 7). Internal funding for research has decreased since 1998. Combined with the limitation of matching funds, this may have a negative impact on the recruitment and retention of faculty. The dean is working with the university, HCCSJ and government of NL to finalize approval for construction of new research space. Geographic isolation and limited opportunities for faculty members' spouses are additional challenges. However, improved remuneration, the availability of tenure-track positions, policies allowing spouses to work within the same Faculty, and the family-friendly atmosphere and the unique culture contribute to the recruitment and retention of faculty members. (PASS report 2, PASS report 8).

The increase in number of graduate students enrolled within the Faculty provides great potential for future recruitment, particularly within the divisions of basic medical sciences and community health. As well, many of the medical graduates take up positions in the Faculty. Currently 65% of full-time faculty and 70% of

stipendiary part-time faculty with M.D. degrees are graduates of the medical school. Of note is that 61% of fully licensed GPs practicing in the province are graduates of this medical school. There is a strong desire for many of our medical graduates to return to the province and the medical school; this contributes to the recruitment of high quality faculty who want to stay. When one includes the graduates of other medical schools who did postgraduate residency training at Memorial then 75% of physician specialists and GPs practicing in the province have trained here. Maintaining strong relationships with the Department of Health and Community Services and regional health boards has important implications for the recruitment and retention of faculty members. The Health Care Corporation of St. John's (HCCSJ) has a protocol for recruitment that involves consultation with the appropriate division chair within the Faculty of Medicine. Further collaboration and communication is facilitated through committee representation. The dean sits as an ex-officio member of the HCCSJ Board; there is a Liaison Committee co-chaired by the CEO of the HCCSJ and the dean. The HCCSJ VP Medical Services is a member of the Faculty of Medicine's Postgraduate Advisory Committee. Despite the strength of the relationship between the HCCSJ and the Faculty of Medicine, there are certain challenges. The HCCSJ completes an impact analysis before offering new positions, potentially making it more difficult to hire faculty members in cost-intensive specialties.

Clerkship training experiences are currently being offered at two hospitals in New Brunswick while family medicine is offered at 9 hospitals in that province. This reflects the Faculty's commitment to distributed learning as a strategic direction for the future. To date, 61 part-time faculty appointments have been made in New Brunswick.

The demographics of incoming undergraduate medical students have shifted with an increasing number of female students being admitted. This is consistent with the national trend. The gender balance within the faculty is comparable to the national average.

Of note is the high number of women serving in senior administrative positions within the

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Faculty (vice dean, associate dean of basic medical sciences, chair of medicine, chair of radiology, assistant dean of UGME, assistant dean of research and graduate studies, assistant deans of PGME).

With greater emphasis being placed on disease prevention and health promotion, and to be responsive to the population served by Memorial and the mission statement of the Faculty, it may be necessary to create additional faculty appointments within areas such as Community Health and Clinical Epidemiology (**recommendations #5, #26, #27**). (FA-1, PASS report 8).

*4. Evaluate the availability of opportunities for both new and experienced faculty members (full-time, part-time, and volunteer) to improve their skills in teaching and evaluation. Is assistance such as training sessions from education specialists readily available?*

The Office of Professional Development has delivered continuing medical education programs since 1966. It is the only university-based CME office in the province and therefore plays a leading role in providing professional development opportunities to our health care professionals. The “TIPS” basic clinical teaching skills workshop is offered on a bi-annual basis in the Fall and Winter semesters to faculty and residents.

The Centre for Collaborative Health Professional Education was established 1999 by the Directors of the schools of Nursing, Pharmacy and Social Work, and the deans of the faculties of Education and Medicine. The Centre’s mission is to enhance the education of health care professionals through collaborative, interdisciplinary programs. The Centre develops programs in response to needs expressed by faculty members. Most recently there has been greater participation in technical/computer based programs while programs aimed at improving teaching methods are under-utilized. The Centre offers a Graduate Diploma in Health Professional Education designed to help health professionals

develop their skills as teachers and leaders in educational program design, development, evaluation and administration (**recommendation #11**). (FA-4, FA-11, ED-8).

#### B. Personnel Policies

*5. Evaluate the system for the appointment, renewal of appointment, promotion, granting of tenure and dismissal of faculty members. Are the policies clear, widely understood, and followed?*

In the Divisions of Basic Sciences and in Community Health the need to hire new faculty is often related to retiring faculty members and can be anticipated in advance. Despite this, negotiating the need for new appointments and recruiting new faculty members, is often not initiated in a timely manner. In the clinical disciplines a challenge exists when a demonstrated need is not supported by the affiliated health board.

The Divisions of Basic Sciences and Community Health follow the MUN Faculty Association (MUNFA) Collective Agreement for policies regarding faculty appointment,

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renewal of appointment, promotion, granting of tenure and dismissal ([www.med.mun.ca/munfa](http://www.med.mun.ca/munfa)). Clinical faculty members are not in the bargaining unit but use the MUNFA collective agreement as a guideline for the terms and conditions of appointment, promotion and tenure.

Official faculty appointments are made by the Board of Regents. New faculty members receive a letter outlining the terms and conditions of employment. MUNFA members are also given a copy of the Collective Agreement. New clinical faculty members meet with personnel from Medical Practice Associates to discuss clinical earnings/benefits. Teaching, administrative and research responsibilities are discussed with the clinical discipline chair or the associate dean. A formal orientation to the Faculty of Medicine and Memorial University is offered once in December (**recommendation #6**). (FA-7, FA-9).

*6. Assess the adequacy of institutional and departmental conflict of interest policies relating to faculty members' performance of their academic responsibilities.*

University policies deal with conflict of interest in relation to research and private interests of faculty/staff. Medical school policies deal with commercial support of continuing medical education. (FA-8).

*7. Describe the extent of feedback provided to faculty members about their academic performance and progress towards promotion. Are faculty members regularly informed about their job responsibilities and the expectations that they must meet for promotion?*

MUNFA members adhere to the Collective Agreement with documented annual reviews. Clinical faculty members are evaluated on a yearly basis by their clinical chair, with review of scholarly plans, expectations and performance. The annual review process for clinical faculty members is not uniform across disciplines and is sometimes not well documented. An advisory committee on faculty promotions and tenure was created and developed guidelines about specific areas to be covered and documented in annual evaluations. There is, however, still some concern that this process has not been sufficiently formalized and faculty members are therefore not completely clear about what is expected of them. Some suggest that a standard approach may not be feasible due to the inherent variation existing between clinical disciplines (**recommendation #10**). (FA10). The Faculty of Medicine is investing in an electronic CV system for clinical faculty. The P & T guidelines for clinical faculty are being refined to better reflect excellence in their important clinical, research and leadership roles.

*8. Discuss the extent to which education is valued in the institution. How are the degree and quality of participation in medical student education factored into decisions about faculty retention and promotion?*

The MUNFA Collective Agreement states that the duties of its members are undergraduate and graduate teaching, academic advising, and consulting with students [Article 3.01 (a) and 3.02 (c)]. The expectation is that approximately 40% of time is spent teaching, 40% of time is spent on scholarly activity and 20% of time is spent on service.

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The actual distribution of duties is negotiated at the member's annual meeting with the associate dean.

Numerous clinical faculty members hold administrative positions important to the delivery of the undergraduate curriculum. Clinical commitments often encroach on their ability to perform their administrative duties, despite the provision of protected time for these responsibilities. Where appropriate, students' feedback is solicited and considered in the faculty evaluation process. The 7<sup>th</sup> principle for curriculum reform (1995) states: "The central role of participation by faculty in the undergraduate curriculum must be reflected in a program of faculty development and in promotion and tenure decisions (see recommendation #11).

### C. Governance

*9. Evaluate the effectiveness of mechanisms for organizational decision-making. Are necessary decisions made in a timely and efficient manner with appropriate input from concerned parties? Assess the relative roles of committees of the faculty, department heads, and medical school administrators in decision-making.*

Faculty Council meets once a month, is chaired by the dean, and all faculty are welcome to attend. The Resource Management Committee consists of the dean, the clinical chairs, the associate and assistant deans, the financial officer, and the head of the Health Sciences Information and Media Services; they meet once a month. Each of the divisions and clinical disciplines has monthly meetings from September to June the next year. There are thus many opportunities for input in decision-making. There have been at least two weaknesses in the system: a) Faculty Council has not

been well attended for a number of years but that has improved the last year and b) decisions had often been made without identifying the person(s) responsible for follow-up. That too has been corrected (see recommendation #1).

The Faculty of Medicine has strong relationships with the regional boards, particularly the HCCSJ. Numerous mechanisms facilitate effective communication. The difference in organizational structure does, however, pose some challenges. The Faculty of Medicine matrix structure of the clinical disciplines mesh well with the HCCSJ departmental organization with 10 clinical programs. Each program has a leadership team comprised of the program director, clinical chief (HCCSJ) and discipline chair (Faculty of medicine). In some cases the same individual may serve as both clinical chief and discipline chair. Their administrative support is, however, divided between university and HCCSJ positions, which impacts overall efficiency (**recommendation #28, #29**). (FA-12, FA-13, FA-14). The overall small size of the Faculty of Medicine and HCCSJ with integrated proximity facilitate communication and collaboration.

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*10. Assess the effectiveness of the methods used to communicate with the faculty. Do faculty perceive themselves to be well informed about important issues at the institution?*

In addition to the ways of communicating with faculty and administrators mentioned in #9 above, two publications are produced by the Faculty: (1) MUNMED is the Faculty of Medicine newsletter, published 4 times per year, contains feature articles and information relating to faculty (new appointments, awards received) and (2) MUNMED News, directed mainly at staff, is produced on a monthly or as-needed basis. In addition, when needed, information is sent from the dean's office by e-mail to all faculty. Faculty overall perceive themselves to be well informed about important issues relating to the Faculty of Medicine. (Faculty of Medicine Orientation Guide: Publications, FA-14, PASS report 8).

## V. EDUCATIONAL RESOURCES

### A. Finances

1. *Discuss the appropriateness of the balance between the various sources of financial support for the school (i.e. state and local appropriations, income from patient care, endowments, tuition income, research income, hospital revenues). Are revenue sources stable? How do you view the prospects over the next five years?*

The relationship between the MUN Faculty of Medicine and the provincial government is unique in Canada. The dean and officials of the department of health and social services negotiate the financial budget for the Faculty through open discussions and dialogue. This process is considered more collegial than adversarial and has worked well. Thus the Faculty gets its main funding from the provincial government and not from the university (ER-2-3). For the 2002-03 budget year the funding from government covered 80 % of the schools total expenses while tuition and fees covered 13%. Salaries and benefits overall accounted for 73% of the expenses leaving only a small amount for other operating costs. For 2003-04 the funding from government increased by 1 million to \$21,088,100 while income from tuition and fees dropped slightly. Due to salary increases, salaries and benefits now constitute 75.5% of the schools expenses. A major problem has been government's unwillingness to recognized legitimate expenses such as pension reform and step increases in salaries. These expenses must be met and the only source of funding is the operating budget. The dean has requested increased funding in the budget for 2005-06. If granted, this funding will be used for financial support for new research space, new faculty positions and general upkeep of the facilities.

The income from tuition and fees is likely to remain stable while it is hoped that funding from government will increase over the next five years. (ER- 2-3, PASS report 9, **recommendation #33**).

2. *Comment on the degree to which pressures to generate revenue (from tuition, patient care or research funding) affect the desired*

*balance of activities of faculty members. If so, what mechanisms are in place to protect the accomplishment of the educational mission?*

That the Faculty of Medicine is small does negatively affect research, particularly research by clinical faculty who find it difficult to commit the time due to their other duties (Recommendation #7, PASS report 2). There are plans for further educational programs that can not go ahead due to lack of funding (PASS report 9), however, there is no real evidence that the educational mission is suffering.

*3. Describe how the school has positioned the clinical enterprise (faculty practice plan/organization and structure of the healthcare system) for best results in the local health care environment. Is planning related to the clinical enterprise occurring?*

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The Faculty of Medicine and the HCCSJ share many responsibilities in educating future doctors and operating a teaching facility. Much cooperation and continuous review is needed to ensure that these responsibilities are shared fairly. The good relationship between the Faculty and the HCCSJ is considered to be one of the strengths of the Faculty. A need for a more ongoing consultation with associate deans and clinical chairs and the head librarian of the medical library in the development of the budget has been expressed (PASS report 1, PASS report 9, recommendation #28, **recommendation #34**).

*4. Describe how present and future needs are being addressed. Is the financial condition of the school such that these needs can be met?*

Financial difficulties are not easily resolved; the need for money is always there. However, the Faculty of Medicine has adequate funds to meet its requirements and there is reason to think it will continue to do so in the future. Government is well aware of the benefits of having the medical school in the province. It is unlikely that tuition fees will be raised; an increase in tuition fees would hit students from rural areas the hardest. As those students who are

raised in rural areas have the highest probability of practicing in rural areas, raising tuition will be counter to the mission of the Faculty of Medicine.

#### B. General Facilities

*5. Evaluate the adequacy of the general facilities for teaching, research, and service activities of the medical school. Is the opportunity for educational change (e.g., introduction of small group teaching) constrained by space concerns?*

The Medical School, the General Hospital and the Janeway Childrens' Hospital are housed in a single building complex. There are no serious concerns regarding teaching space for lectures or small group teaching within this building. Discussions with clerks raised issues regarding outside facilities used by the school. These issues pertained to locker space, study space, on-call facilities etc. and differed from one site to another across the province.

The main problem regarding space was reported by Basic Medical Sciences and Community Health. Both divisions need more office space and BMS also needs more lab space. Lack of space hampers recruitment and research. Plans for creating new space have been discussed but not finalized and no guaranteed funding has been promised. (See also I.B.5 of this report and recommendation #5). (ER-7, PASS report 10).

*6. Discuss the adequacy of security systems on each campus and at affiliated sites.*

Security within the Medical School is provided by the university. If requested, an escort can be provided to your car after dark. There are enough lockers for the medical students. As mentioned in #5 above, students complained about lack of lockers at some sites. Security at St. Clare's Mercy Hospital and the Waterford Hospital is provided by Shannahan's Investigation and Security LTD Walk-out service is also provided at St. Clare's Hospital.

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#### C. Clinical Teaching Facilities.

*7. Analyze the clinical resources available to the medical school. For the size of the student body, are there adequate numbers of*

*patients and supervisors available at all sites? Is the patient mix appropriate? Are clinical facilities, equipment, and support services appropriate for exemplary patient care? Discuss the availability, quality, and sufficiency of ambulatory care facilities for teaching.*

As mentioned previously, there were some problems related to occasional low patient numbers in the psychiatry and pediatrics rotations. However, these have been solved by scheduling the rotations differently and a shift towards outpatient clinics. The increasing severity of inpatients and their more rapid discharge makes them less suitable for involvement in clinical skills teaching. The standardized patient program has been carefully developed as an effective learning resource for faculty to use with the students. Another problem is the students' perception that in the clinical skills course the standardized patient sometimes takes over the role of faculty in teaching. The extent of this problem is not known but the pre-clerkship chair is aware of the situation (see II-A.2, recommendation #6). Interviews with the students indicate that some perceive they do not get enough academic bedside teaching; this may be physician and rotation dependent.

When the Janeway Childrens' Hospital was added to the General Hospital building in 2002 the shortage of clinical skills teaching space was rectified. Overall, physical facilities for teaching of medical students appear to be adequate. The racial mix of patients is not as varied as in bigger centers reflecting the region's diversity. For example, about 40 % of the students are of rural origin as compared to the average 11 % in Canadian medical schools (see recommendation #14 and #21).

*8. Describe and evaluate the interaction between the administrators of the hospitals/clinics used for teaching and the medical school administration. Does the level of cooperation promote the education of medical students?*

Interaction between the administrators of teaching sites and the administrators of the medical school is very good and promotes the education of medical students. The dean is an ex-officio member

of the board of the HCCSJ and the rural sites used are visited by faculty involved in the teaching of medical students (clerkship chair, discipline rotation chair etc.). (IS-I.A.3.b, PASS report 1, see also recommendation #22).

*9. Describe and evaluate the level of interaction/cooperation between the staff members of the hospitals/clinics used for teaching and medical school faculty members and department heads, related especially to the education of medical students.*

We are not aware of any major problems in the interaction/cooperation between hospital/clinic staff and medical school faculty members. There is collaboration between clinician and researcher (basic sciences, community health, clinical epidemiology) in a number of projects and this sometimes includes medical students. Many of the courses/subjects in pre-clerkship are team taught and require cooperation between clinical and non-clinical faculty (Required Course and Clerkship forms).The Health Sciences

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Centre houses the General Hospital, the Janeway Childrens Hospital, the Faculty of Medicine and the Schools of Pharmacy and Nursing. This promotes interaction and collaboration between students, clinicians and faculty.

#### D. Information Resources and Library Services

*10. Evaluate the print and the non-print holdings of the library as a resource for medical students, graduate students, and faculty members.*

The Health Sciences Library (HSL) serves the faculty, students and staff of the Faculty of Medicine, the School of Nursing, School of Pharmacy, the HCCSJ, affiliated health care regions, health care professionals, legal professionals, the media and general public. Among the 9 guiding principles governing the activities of the library (adopted 1999) are :

- Expand the library's role as a health information resource
- Emphasize effective access to a mixture of information resources in a variety of formats for library clients.

- Update and improve the physical environment of the library
- Expand the library's role in the curriculum of MUN's health sciences educational programs.

While the print holdings of journals has dropped from 1361 in 2000-01 to 1199 in 2002-03, the number of electronic journals held by the library has increased from 28 to 1410. Responses to questionnaires sent to medical students, graduate students and faculty indicated that all three groups were generally satisfied with the print and non-print holdings of the library.(ER-11.e, PASS report 11).

*11. Comment on the adequacy of information technology services, particularly as they relate to medical student education. Are the information systems of the medical school and major clinical affiliates sufficiently well integrated to assure achievement of medical school missions? Note any problems.*

The Information Resources function within the Faculty of Medicine is housed within the Health Sciences Information and Media Services (HSIMS) unit. The mission statement of HSIMS reads as follows: "To plan for and arrange the provision of all computing and audiovisual support required for the educational, clinical, administrative and research activities of the faculty, students and staff of the Faculty of Medicine and other client organizations as appropriate. Included within this mission is a commitment to teaching about the use of evolving information and audio-visual technologies and assisting clients to make use of these technologies". Support for teleconferencing and videoconferencing is available through the Telehealth and Educational Technology Resource Agency. The information systems of the Faculty of Medicine/University and the HCCSJ generally operate adequately together. Some problem areas have developed; the difficulties generally arise from legitimate concerns about security and differences in data networking configurations between two very different organizations. An example is

difficulties in establishing point to point videoconferencing between university and HCCSJ data networks. Both sides are committed to resolving the problems. Responses to questionnaires sent to faculty, medical students and graduate students indicated that overall service satisfaction was high. In general, there was a wish for greater responsiveness in the area of personal computer and computer application support. Faculty indicated that while support for Mac users has improved it is still not perfect. There is also a need for full multimedia capabilities in all the larger lecture theatres. All medical students and graduate students are given e-mail accounts early after arrival at the school (**recommendation #30, #31**). (ER-11.c, PASS report 11).

*12. Evaluate the usability and functional convenience of the library. Are hours appropriate? Is assistance available? Is study space adequate? Are resources, such as computers and audiovisual equipment, adequate?*

The HSL is on the first floor of the Health Sciences Centre. The hours are from 8:30 a.m. to 11:45 p.m. from Monday to Thursday, and from 8:30 a.m. to 6 p.m. on Friday. Weekend hours are from 10 a.m. to 5:30 p.m. on Saturday and from 1:30 p.m. to 9 p.m. on Sunday. During the summer the library closes at 9:45 p.m. from Monday to Thursday. Nearly 90% of the medical students indicated that they visited the library at least once a week, 50% indicated they used it daily. There were some comments about noise level from the front desk. The students indicated that they would like to see longer opening hours, (open at 8 a.m. during the week and be open on Sunday mornings, which would require additional funding to rectify). There were no/few complaints about study space. Resources were considered adequate (**recommendation #32**). (ER-12.e, PASS report 11)

*13. Assess the library and information technology staff contributions to the education of medical students and the professional development of faculty members in the following areas:*

- *Teaching specific skills, such as instruction in computer usage and bibliographic search.*
- *Retrieving and managing information*
- *Interaction with the curriculum committee to coordinate various library and information resources with planned curricular design.*

During the first week after arriving at the medical school, library staff teach students how to do bibliographic searches and to retrieve and manage information. Other types of computer courses are offered to faculty and staff by the HSL several times during the year. Medical students, graduate students and faculty expressed their appreciation of the availability and helpfulness of the library staff.

Room booking for teaching is done through the HSIMS office and staff there is always very helpful. As well, help to put teaching material on the web is also available. As the school moves towards distributed learning we will rely on services from that office. (ER-11.d, PASS report 11, PASS report 4.II.B.4).

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## RECOMMENDATIONS

1. Reassess the mandate and functioning of Faculty Council, including its role in planning for the Faculty of Medicine. Ensure that when a decision is agreed upon in Faculty Council an individual (or several) is identified to see the decision through.

*Action: Ad hoc committee of Faculty Council has been established to review and revise bylaws. The dean has established an action management system .*

2. Complete affiliation agreements with all clinical affiliates in a timely fashion.

*Action: Some have been completed but with the merger of health boards new agreements will have to be negotiated. Among these is a specific affiliation agreement on research.*

3. Review position specifications for leadership positions and ensure timely searches to fill senior administrative positions.

*Action: Job descriptions are being updated. Currently there is only one open position and recruitment is ongoing.*

4. A mechanism for reviewing the current graduate programs should be developed.

*Action: The assistant dean of research and graduate studies has requested from the school of graduate studies that such a review be initiated. This is to be done under the office of the VP academic; the dean will make such a request.*

5. Long-term planning for office and lab space should be initiated and should take into consideration the additional space required for our growing graduate student population.

*Action: The dean is working with the university, the HCCSJ and government of NL to finalize approval of new research space. A computerized space inventory is being created.*

6. Long-term planning should be strengthened so that new faculty appointments can be made in a more timely manner. Needs assessment should be ongoing

such that evidence is available to support the necessity of the appointment for teaching, clinical service, research and administration.

*Action: Prior to the 2002 Faculty Retreat, information re needs was requested*

*from the associate deans and clinical chairs. The dean has requested funding for a*

*chair in oncology and 16 additional clinical faculty positions as well as*

*6 basic science positions in the 2005-06 budget.*

7. A strategic plan for research and research support should be developed. This

includes realistic start-up fund requirements in division of basic sciences, and

providing personnel support for the clinical disciplines. As well, funding for the

R & D committee should become a priority.

*Action: Negotiations are being finalized with the university for an increased*

*share of the Indirect Costs Program of Industry Canada. A position of*

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*associate dean of clinical research has been established and the position of*

*assistant dean of research and graduate studies has been changed to an*

*associate dean position. The new associate deans will lead the faculty in the*

*development of a strategic plan for research. The associate deans will work with*

*HCCSJ to participate in the CIHR Clinical Research Initiative.*

*The R & D committee*

*will become a standing committee of faculty council and funds are to be committed.*

8. Additional sources of funding for graduate student stipends should be identified in order to accommodate the growth of the student population.

*Action: A new financial agreement with the university and the school of graduate studies is being finalized.*

9. Where feasible, clinical disciplines should explore alternative payment models as a way to balance academic responsibilities and increase productivity.

*Action: Alternative funding proposals are under consideration by several disciplines.*

10. A standard approach to the annual review of clinical faculty members should be explored. Policies should be clearly outlined and easily accessible to all faculty. Improved documentation of the review is needed.

Teaching and administration contributions should be a valued component of the annual review.

*Action: The Faculty of Medicine is investing in an electronic CV system for clinical faculty. The P & T guidelines for clinical faculty are being refined to better reflect excellence in their clinical, education, research and leadership roles.*

11. Faculty members should be encouraged to participate in courses on teaching methods.

The possibility of linking student evaluations with faculty progress and professional development should be explored. As well, the availability of teaching/evaluation

workshops for our part-time faculty in New Brunswick should be explored and, if appropriate, arrangements should be made by our medical school to offer such workshops.

*Action: Office of faculty development is developing a proposal for a Teaching Scholar Program.*

12. There should be annual reviews of objectives so that objectives are current, useful and well understood by students and faculty. This review should be done with the general objectives of the institutional undergraduate medical education in mind.

*Action: Recommendation referred to UGMS committee and resource management committee.*

13. The reason(s) for our graduates scoring slightly below the national average in the LMCC Part I exam should be ascertained and, if appropriate, teaching methods and/or curriculum changed.

*Action: Recommendation referred to UGMS committee.*

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14. The medical school should explore ways to enhance exposure of students to cultural and ethnic diversity in the educational setting.

*Action: Refugee issues have been added to the clinical skills course; a workshop for students and faculty is being planned.*

15. A specific clinical education component on end-of-life care issues appears to be somewhat lacking.

*Action: A one-week course in palliative care has been instituted.*  
*Recommendation*

*referred to UGMS committee.*

16. A plan should be developed to increase medical student participation in summer research projects.

*Action: Referred to the office of research and graduate studies.*

17. Thought should be given to ways of increasing the number of students from rural areas admitted to the medical school.

*Action: Usually about 40 % of students in our classes come from rural*

*areas. Increasing the number is perhaps best effected by increasing the number of scholarships and bursaries available; one of the functions of the development*

*office is to raise money for scholarships.*

18. The issue of practice in under-serviced areas should be addressed in the context of the delivery of the curriculum. As well, the career counseling program should be evaluated to assess its ability to encourage choices related to family medicine and practice in under-serviced areas.

*Action: Referred to UGMS committee and Director of MedCAREERS. A Family*

*Medicine Interest Group has been active for the past 2-3 years.*

19. The students should be very strongly encouraged to take advantage of the seminars and individual counseling that MD Management offers.

*Action: Referred to office of student affairs and UGME office.*

20. Where appropriate, both the staff person and the resident should complete the ITER.

*Action: Referred to UGMS committee, clerkship committee and clinical chairs.*

21. Remind clinical faculty that, whenever possible, they should take the time necessary to provide academic bedside teaching. Formal teaching in surgery should be increased.

*Action: Referred to clerkship committee and clinical chairs.*

22. There is a need to ensure that all teaching sites in the province and in New Brunswick receive regular onsite visits by faculty from the medical school.

*Action: Referred to UGMS committee.*

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23. A continuing education program should be developed for faculty, staff and students to highlight the issue of student mistreatment. An assessment of the prevalence of student mistreatment should be done and evaluation of the policies, procedures and educational program should be conducted with current and graduating students. Efforts should be made to ensure that all students are aware of the student mistreatment policies and procedures.

*Action: The dean has initiated establishment of an ombudsperson to respond.*

24. Ongoing support for the Wellness committee is needed.

*Action: The assistant dean of student affairs and the manager of student affairs*

*co-chair meetings of the committee and events will start in February 2005. The*

*dean has given support by sponsoring lunch time seminars.*

*Students are keen*

*to keep the committee functioning.*

25. While the contribution made by graduate students and residents to the teaching

of undergraduate medical students is valuable in a reciprocal manner, care must be taken to ensure they are not expected to provide excessive educational service.

*Action: Referred to assistant dean for research and graduate studies, assistant deans for postgraduate education. From the former office a survey has been conducted of students and faculty regarding teaching opportunities and needs and a plan will be developed to address this.*

26. Efforts should be made to maintain strong relations with graduate student alumni in order to facilitate future recruitment/retention of faculty members.

*Action: The office of research and graduate studies, with the help of the university alumni office, is developing a database to track and contact former student.*

27. The Faculty of Medicine has the potential to play an important role in the implementation of provincial health plans.

*Action: The dean and other faculty are closely involved with the Medical Services Branch of the Department of Health and Community Services especially With Primary care Reform.*

28. Assess the organizational structure of the clinical disciplines within the Faculty of Medicine in relation to the clinical programs of the HCCSJ, with enhanced efforts to coordinate administrative support as appropriate.

*Action: The newly negotiated principles agreement and Faculty Specific agreement deals with these issues.*

29. The Faculty may benefit from more opportunities (e.g. regular faculty retreats/ strategic planning sessions) for faculty interaction and communication, particularly across divisions.

*Action: Referred to resource management committee.*

30. Explore ways to enhance HSIMS responsiveness in the area of personal

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computer application support and strive to continue service improvements

for all Mac users as well as those availing primarily of portable notebook

computer hardware.

*Action: Existing staff cannot be reallocated to client support without negatively*

*impacting other computer services. Adding an additional PC consultant or*

*equivalent staff member would significantly increase the ability of HSIMS to*

*provide more responsive support at large.*

31. Capital funding should be allocated to address concerns surrounding the overall condition of teaching facilities.

*Action: Requested as priority in budget.*

32. A study should be done of the costs versus benefits of extending the library's

hours of operation; the noise levels within the library should be examined with

a view to acquiring the best soundproofing materials as well as enforcing the

“quiet” policy.

*Action: A space planning committee for the library has been created and has*

*produced introductory plans for redesign of the library. A cost benefit analysis of extending library hours on weekends and holidays will be conducted and discussed with the library advisory committee. Strict enforcement of the library “quiet” policy has been applied through signage and staff intervention.*

33. The Faculty of Medicine should once again approach the provincial government in an effort to have the provincial grant address the issue of incremental costs.

*Action: The dean has discussed this with personnel in the DHCS and it is in this year’s budget request.*

34. The Faculty of Medicine budget should be developed with ongoing consultation with associate deans, discipline chairs and the head librarian of the medical library as a group. This process would ensure transparency and share the responsibility among those charged with meeting the mission statement of the Faculty.

*Action: The dean has empowered the resource management committee (RMC) to take on an advisory position in budget matters. Budget/financial items are a regular agenda item. RMC has been expanded to include program physician leaders (assistant deans).*

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## **SUMMARY**

1. *Summarize the school’s strengths and problem areas, and prioritize the latter. Analyze*

*changes that have occurred since the last survey visit. Have new strengths or problems emerged? Are changing conditions likely to cause problems in the near future?*

#### Medical School Strengths

- The graduates are well prepared for residencies anywhere in Canada.
- The graduates are especially well prepared for rural and general specialties reflecting social responsibility/accountability for our region.
- Clinical based practical medical education with ethics integration beginning in 1<sup>st</sup> year clinical skills.
- Excellent collaboration between clinical disciplines, basic sciences and community health in development, provision and administration of medical education.
- Rural region clinical learning focus by faculty complemented by rural region learning experiences.
- Formal and informal inter-professional learning facilitated by office of CCHPE. Communication and collaboration encouraged by Faculty of Medicine and Schools of Nursing and Pharmacy located in the same building.
- Excellent working relationships with HCCSJ and with Government of NL.
- Increasing research activity – grants have tripled in 5 years with particularly active clinical epidemiology program.
- Caring and dedicated faculty and staff.
- Strong desire of graduates to come back to practice and teach at Memorial.
- Strong community linkage and partnership both with St. John's and the rest of the province

#### Medical School Weaknesses

- The number of full-time faculty is small but complemented by very active part-time faculty; education and clinical duties are covered but there is a need for more full-time faculty to

increase the schools research activity. This is the top priority for the dean.

- There is a lack of space for new faculty, particularly research space. Plans are in place to add new office space. This will free up lab space which is currently being used as office space. This plan is ready to go if funding can be found. There are also preliminary plans of expanding the medical school building; this would first require a full space and needs analysis.
- There is a need to increase start-up funds and support for new faculty. Negotiations are ongoing with the university for a larger share of the Indirect Costs Program of Industry Canada.

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- Alternative funding plans (AFP) for clinical faculty should be pursued with a view to increase faculty commitment to academic activities. The AFP in nephrology is one example; similar models may be followed by other specialties.

There have been a number of changes since the 2000 accreditation visit. i) The Faculty of Medicine has a new dean as of April 2004. Dr. Rourke has a very strong background in Family Medicine and it is likely that he will be particularly supportive of that area of service; since one of the missions of the Faculty of Medicine is to educate physicians for service in rural areas, Dr. Rourke's expertise fits particularly well with the mission. ii) There has been a very substantial increase in research grant funding. Much of that is due to funding of research proposals from new faculty members. To keep the funding at the current level or possibly increase it will require additional research space and hiring of additional young investigators. iii) The seven provincial health boards will have merged to form four boards as of April 2005. It is anticipated that the excellent relationship between the Faculty of Medicine and the HCCSJ will be extended to the board of the Eastern Regional Integrated Health Authority. iv) During the five years since the last

survey visit both the Program Evaluation Committee and the UGMS committee have been almost inactive for about two years. They started functioning again in the Fall of 2003 and there is a general feeling that with new clear Terms of Reference for the committees all involved are contributing to their fullest.

*2. Note major recommendations for the future. How can the strengths be maintained and the most pressing problems addressed? Be brief but specific in describing actions that will need to be taken.*

Action is being taken or has already been taken on the majority of the recommendations that came up during the work of the Task Force committees. There are four recommendations that will go nowhere unless more funding is found. These are: i) Funding to increase the number of full-time faculty. ii) Funding to acquire new space, particularly research space. iii) Funding to increase start-up funds for new faculty. iv) Establish more scholarships/bursaries for medical students. Funding for the first two recommendations must come from government, funding for start-up funds may come through negotiations with the university while funding for scholarships and bursaries may come through the Development Office as donations from alumni and industry. All are being actively pursued by the dean.

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## **APPENDIX**

Members of the Self-Study Task Force

Task Force Chair, Dr. Bodil Larsen, Associate Professor, Basic Medical Sciences

### **I. INSTITUTIONAL SETTING**

PASS Committee 1. Governance and Administration.

Dr. John Harnett, Chair, Full Professor, Medicine

Dr. David Allison, Clinical Assistant Professor, Community Health

Kerry Arnold, 1<sup>st</sup> year medical student

Peter Church, 2<sup>nd</sup> year medical student

Dr. Ken Kao, Associate Professor, Basic Medical Sciences

Dr. Gary Tarrant, Associate Professor, Family Medicine

PASS Committee 2. Institutional Setting

Dr. Laura Gillespie, Chair, Full Professor, Basic Medical Sciences

Dr. Rick Audas, Assistant Professor, Community Health

Dr. Brendan Barrett, Full Professor, Nephrology

Chris Bryniak, 4<sup>th</sup> year medical student

II. EDUCATIONAL PROGRAM FOR THE MD DEGREE

PASS Committee 3. Objectives and Curriculum for the MD

Program

Dr. Alan Goodridge, Chair, Full professor, Neurology

Dr. Natalie Beausoleil, Associate Professor, Community Health

Dr. Chet Michalski, Full Professor, Basic medical Sciences

Megan Turner, 2<sup>nd</sup> year medical student

PASS Committee 4. Structure of the Educational Program

Dr. Frank King, Chair, Full Professor, Anesthesia

Dr. Darrel Boone, Associate Professor, Surgery

Dr. Roger Butler, Associate Professor, Family Medicine

Dr. Penny Hansen, Full Professor, Basic Medical Sciences

Dr. Majed Khraishi, Associate Professor, Rheumatology

Heather Leonard, 2<sup>nd</sup> year medical student

John Martin, 4<sup>th</sup> year medical student

Dr. Christa Mossman, 5<sup>th</sup> year Obstetrics and Gynecology resident

PASS Committee 5. Evaluation and Program Effectiveness

Dr. Abayomi Ogunyemi, Chair, Full Professor, Neurology

Dr. Diane Colbert, Clinical Assistant Professor, Radiology

Kathleen Dooling, 4<sup>th</sup> year medical student

Dr. John McLean, Full Professor, Basic Medical Sciences

Dr. Carolyn Morris-Larkin, Associate Professor, Laboratory  
Medicine

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Dr. Pamela Snow, Assistant Professor, Family Medicine

III. MEDICAL STUDENTS

PASS Committee 6. Admissions

Dr. Conleth O'Maonaigh, Chair, Associate Professor, Family Medicine

Anietra Head, 1<sup>st</sup> year medical student

Dr. Vareesh Gadag, Full Professor, Community Health

Dr. Reiza Tabrizchi, Full Professor, Basic Medical Sciences

PASS Committee 7. Student Services

Dr. Catherine Donovan, Chair, Clinical Associate Professor, Community Health

Dr. Diana Gustafson, Assistant Professor, Community Health

Dr. June Harris, Associate Professor, Basic Medical Sciences

Dr. Kevin Hogan, Clinical Assistant Professor, Community Health

Allison Meiwald, 1<sup>st</sup> year medical student

Dr. Greg Sherman, Assistant Professor, Family Medicine

IV. FACULTY

PASS Committee 8. Faculty

Laurina Leyenaar, Chair, 3<sup>rd</sup> year medical student

Amanda Bennett, 1<sup>st</sup> year medical student

Jason Chaulk, graduate student

Dr. Sheila Drover, Associate Professor, Basic Medical Sciences

Margaret Hamlyn, 2<sup>nd</sup> year medical student

Rebecca King, 2<sup>nd</sup> year medical student

Dr. Maria Mathews, Assistant Professor, Community Health

Dr. Angela Penney, Assistant Professor, Psychiatry

V. EDUCATIONAL RESOURCES

PASS Committee 9. Finances

Dr. Richard Neuman, Chair as of April 2004, Full Professor, Basic Medical Sciences

Dr. George Fox, Associate Professor, Respiratory Medicine

Sasha Sealy, 2<sup>nd</sup> year medical student

Dr. Roy West, Full Professor, Community Health

PASS Committee 10. Facilities

Dr. Terry O'Grady, Chair, Associate Professor, Obstetrics and Gynecology

Dr. Sharon Buehler, Associate Professor, Community Health  
Christine Dawe, 2<sup>nd</sup> year medical student  
Dr. Chet Michalski, Full Professor, Basic Medical Sciences  
Dr. Katie Saunders, resident, Family Medicine

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PASS Committee 11. Information Resources and Library Services

Mr. Gary Peddigrew, Chair, Director of Administrative Services

Dr. Bill Bavington, Full Professor, Community Health

Dr. Xihua Chen, Assistant Professor, Basic Medical Sciences

Alexandra McMillan, 2<sup>nd</sup> year medical student

Dr. Cathy Popadiuk, Associate Professor, Obstetrics and  
Gynecology

Andrew Smith, 3<sup>rd</sup> year medical student

Dr. Howard Strong, Full professor, Psychiatry