

FINAL ASSESSMENT REPORT

Institutional Quality Assurance Program (IQAP) Review

Medical Sciences

Date of Review: February 25th and 26th

In accordance with the University Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response and assessments of the graduate programs delivered by the Medical Sciences Program. This report identifies the significant strengths of the program, together with opportunities for program improvement and enhancement, and it sets out and prioritizes the recommendations that have been selected for implementation.

This Final Assessment Report includes an Implementation Plan that identifies who will be responsible leading the follow up for the proposed recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

Executive Summary of the Medical Sciences Cyclical Program Review

The Medical Science Program submitted a self-study to the School of Graduate Studies January 2015. The self-study presented the program descriptions and learning outcomes, an analytical assessment of these two programs, and program data including the data collected from a student survey along with the standard data package prepared by the Office of Institutional Research and Analysis. Appended were the course outlines for all courses in the program and the CVs for each full-time faculty member in the Department.

Two external reviewers and one internal reviewer examined the materials and completed a site visit in February 2015. The visit included interviews with the Provost and Vice-President (Academic); Dean of the Faculty of Health Sciences; Dean of School of Graduate Studies; Chair of the Department, and meetings with groups of current students, full-time and part-time faculty and support staff.

Overall the reviewers concluded that Medical Sciences program was an impressive one, with a strong foundation in research, faculty who are committed to the program and excellent students conducting high quality research. The reviewers noted that the program is clearly successful in attracting high quality students who then receive excellent training and complete in a timely fashion. They noted, however, that in the past few years there has been a decline in enrollment. They suggested that the program may wish to review recruitment strategies and monitor changes over the next few years.

The following program strengths and weakness were also noted:

- **Strengths**

- The Program provides a strong caliber of student supervisors
- The Program is successful in attracting high caliber students
- Students have a strong sense of local community
- A large number of excellent faculty are involved in the Program
- The laboratory environment is supportive and integral to student learning and laboratory facilities at McMaster are excellent
- The Faculty have a strong commitment to maintain the quality of the Program
- Students complete their degrees in a timely fashion
- The admission requirements are well aligned with the Program's learning outcomes
- The Program's goals are well aligned with McMaster's academic plan
- Student ratings of the Program have been consistently strong
- The Program has a good record of graduating students on time
- The Program has a very good record of productivity per student (3-4 presentations at national/international meetings and 3-4 published papers during a doctoral program)
- The Faculty maintain an impressive record of research funding and output despite the current funding environment
- The management team and support staff are highly dedicated and supportive of the program

- **Areas for Enhancement or Improvement**

- Students attend local research group seminars and meetings but are less engaged in Program wide activities
- Some students feel that some courses are too specialized, focusing on areas defined by faculty research specialization, which may be of interest to only a limited student population
- There is no uniform vision for the right mix of "core" courses expressed by students or clear sense of identity or core foundational knowledge within Medical Sciences.
- Students feel less knowledgeable about medical sciences outside their thesis area, and that more "core" or modular courses with components of broader interest would be advantageous.
- Some students expressed uncertainty with expectations around contact with advisors, operating procedures around feedback from supervisory committee meetings and preparation and evaluation for qualifying exams.
- The Program may not receive sufficient attention from the Chairs of various clinical departments involved in the program which might contribute to disengagement or lack of cohesion in the Program.
- The Program is somewhat fragmented, academically and socially, as well as geographically and geographical distances between research sites poses a problem for courses, program wide seminars and social functions.
- The Program does not have an undergraduate "feeder" degree program.

Summary of the Reviewers' Recommendations with the Department's and Dean's Responses

Recommendation	Proposed Follow-Up	Responsibility for Leading Follow-Up	Timeline for Addressing Recommendation
<p>The program might re-examine its curriculum with the goals of creating a clearer sense of identify and “core” fundamental medical science knowledge. The review committee suggested that a unifying medical sciences course might assist with addressing this issue.</p>	<p>The program will re-examine its curriculum needs. The program recently did a curriculum needs assessment, by research area, that needs to be reviewed in detail with the program leadership team. Next step: The program's Executive team, in conjunction with the Curriculum Committee, has begun discussing the possibility of introducing new courses with 'core' fundamental material and the possibility of modifying other courses to better meet student needs. Some of the ideas under discussion include a multi-module course, a series of ¼ courses. The course curriculum will also be included on the agenda for the upcoming program retreat with faculty and students for further broad consultation and input</p>	<p>Assistant Dean Key Contributors: Curriculum Committee and the Executive Committee.</p>	<p>Summer-Fall 2015</p>
<p>The program may wish to review its recruitment strategies to monitor decreases in enrollment.</p>	<p>Program marketing and student recruitment will be reviewed as these have been prioritized as a major focus for the Executive Committee. The program will explore ways to address how it could improve its recruitment, given the absence of a direct undergraduate feeder program. Next step: The Executive Committee will review its recruitment strategies, and bring the matter forward for further consultation with the Advisory Group. The program will also discuss ideas on how to improve recruitment at the upcoming program retreat.</p>	<p>Assistant Dean Key Contributors: Executive Committee.</p>	<p>Fall-Winter 2015 and ongoing.</p>

<p>Improved orientation and documentation of expectations around the comprehensive exam would assist students in clarifying expectations.</p>	<p>The Executive Committee will strike a working group comprised of faculty members and senior doctoral students to work on improving the orientation, and description of the expectations for the Comprehensive Examination and report back to the Executive Committee with recommendations. This working group will be asked to review the Program's Comprehensive Exam Guidelines (which are published in the program handbook) to ensure clarity and usefulness for both students and faculty.</p>	<p>Assistant Dean Key Contributors: Executive Committee and ad-hoc working group.</p>	<p>Fall-Winter 2015</p>
<p>Finding ways to promote greater cooperation and interaction between the participating departments was of greater importance as this would foster interdisciplinary and translational research opportunities.</p>	<p>The issue of engagement, including the Department Chairs, is a priority item for the Program. The Executive will meet with the departmental Chairs and Advisory Group and set up an ad-hoc group to establish an action plan to promote interdisciplinary and translational research.</p>	<p>Assistant Dean Key Contributors: Executive Committee, Department Chairs and the Advisory Board</p>	<p>Ongoing with the first action item in May 2015</p>
<p>Enhancement of opportunities for students to interact across the program would be a great advantage. Examples: student-run seminar series, newsletters or social media, transmitting seminars and courses electronically.</p>	<p>The Executive Committee will be meeting to discuss how it can better engage students and encourage them to interact across the program. This issue will be discussed at the upcoming retreat.</p>	<p>Assistant Dean Key Contributors: Executive Committee, students and faculty.</p>	<p>Fall 2015 and then ongoing</p>
<p>Exploring the possibility of creating an "MD stream" of trainees for clinical fellows to participate in degree training in order to enhance</p>	<p>Clinical fellows are already encouraged to enroll in the Program as part of their formal training in the Clinical Investigator Program. The Program will meet with the Head of the Clinical Investigator</p>	<p>Assistant Dean</p>	<p>Summer 2015</p>

student recruitment.	Program to improve marketing to this group.		
The reviewers suggested that strategies be developed to recruit international students to promote program leadership internationally.	The Program will discuss this suggestion with Faculty and Students at the upcoming retreat. Currently, the usage of the program resources for international students is aligned with the Faculty and University direction.	Assistant Dean	Summer 2015
Creation of the “Summer Undergraduate Research Program” to help attract undergraduates to graduate training.	<p>This is an interesting suggestion that we respectfully note falls outside the mandate of the program. The creation of an undergraduate research program could not be done with Program resources as the funds must be used to support graduate education. As faculty on the Executive are interested in the idea of attracting undergraduates to graduate training, the program will bring the issue forward to the Advisory group and the retreat for further input and ideas on how this might be pursued.</p> <p>Next step: The Program Executive will discuss this at the upcoming retreat and form an ad-hoc group to improve the marketing of our Program to undergraduates.</p>	<p>Assistant Dean</p> <p>Key Contributors: Executive Committee and ad-hoc group.</p>	Fall-Winter 2015 and then ongoing
The tool mygradskills.ca should be introduced to students and faculty to assist students with career development. Engaging alumni in the program activities, for example, to discuss career paths would also be useful.	<p>“mygradskills.ca” is posted on the program website and will be added to the Program Handbook.</p> <p>The program will emphasize career development at its orientation session and engage alumni in program activities, including career information sessions.</p>	<p>Assistant Dean</p> <p>Key Contributors: Executive Committee</p>	Ongoing with the first action item in May 2015

Dean’s Response:

The Dean noted that they agreed with the program's detailed response on how it will address the weaknesses noted by reviewers.

Department engagement with program: The Dean's office recognizes that owing to the fact that multiple departments are involved in the program, it has not had the level of attention from the Chairs of the departments that is needed. The Dean affirmed a commitment to ensuring that departments become more engaged with the program and will be working with the Assistant Dean, Department Chairs and the Associate Dean of Graduate Studies to ensure there is strong departmental representation providing effective input on program matters. The program has implemented an Advisory Group; the Associate Dean of Graduate Studies is a member of this group and will ensure that department representatives are aware of their responsibility to report back to their department and Department Chair in addition to advising the program on relevant department matters and views.

Recruitment challenges: The Dean's office is closely monitoring the program's enrolment and the Assistant Dean of the program is engaged in the working group that the Associate Dean of Graduate Studies is leading to enhance graduate enrolment. At the recommendation of the Dean, the program has extended the period for accepting applications. The Dean notes that while the program does not have a feeder program (other than the Bachelor of Health Science program) they agree with the program that the reviewers' suggestion that a summer undergraduate research program be created to encourage recruitment is outside of the scope of the program's responsibilities and budget. However, the Dean suggested that the program should bring the matter of creating such a program forward to the Faculty's Education Council for consideration.

Quality Assurance Committee Recommendations

The Quality Assurance Committee reviewed the above documentation and recommends that the program should follow the regular course of action with an 18-month progress report and a subsequent full external cyclical review to be conducted no later than 8 years after the start of the last review.