

UTQAP Cyclical Review: Final Assessment Report and Implementation Plan

1 Review Summary

Program(s) Reviewed:	Graduate Diploma in Health Research (GDipHR) Medical Science: MSc, PhD <ul style="list-style-type: none"> • <i>Fields:</i> Bioethics; Biomedical Science; Clinical Science; Health Professions Education; Population Health/Health Sciences; Radiation Oncology
Unit Reviewed:	Institute of Medical Science (IMS)
Commissioning Officer:	Dean, Temerty Faculty of Medicine
Reviewers (Name, Affiliation):	<ul style="list-style-type: none"> • Dr. Tara Beattie, Vice Provost and Dean, Faculty of Graduate Studies, University of Calgary • Dr. Anne-Marie Lauzon, Professor, Dept. of Medicine, McGill University • Dr. Rosalind (Roz) Segal, Dean for Graduate Education, Harvard Medical School
Date of Review Visit:	April 11-12, 2024
Review Report Received by VPAP:	October 17, 2024
Administrative Response(s) Received by VPAP:	March 17, 2025
Date Reported to AP&P:	April 10, 2025

Previous UTQAP Review

Date: October 15, 2018

Summary of Findings and Recommendations

Significant Program Strengths

- High energy and intellect among graduate students
- Impressive MHSc curriculum design and clearly articulated program objectives; program is receptive to student feedback and expectations
- Very promising new professional development initiatives could serve as a model for other programs
- Overall, the reviewers were extremely complimentary of all programs and of IMS, indicating they are deserving of their top international ranking.

Opportunities for Program Enhancement

- Address faculty and staff resources and space available to support the MHSc in Translational Research program, given its growth
- Improve programs' curricula, including differentiating the objectives for the MSc and PhD programs
- Refresh core courses
- Increase access to statistical data analysis courses
- Use curriculum mapping to help clarify program outcomes and support PhD enrolment in the context of the changing landscape of doctoral studies
- Enhance the student learning experience through providing adequate professional development opportunities and a range of support services
- Engage all stakeholders in a renewal of the strategic plan, including a review of decision-making and committee structures
- Consider forming research streams
- Improve communications among all stakeholders

Current Review: Documentation and Consultation

Documentation Provided to Reviewers

Confirmation/agreement Letter; terms of reference; self-study report; faculty CVs; course descriptions; schedule; 2018-19 UTQAP review documents (reviewers' report and Director's and Dean's responses), FAR-IP and Interim Report; Dean's Report 2023; Temerty Faculty of Medicine's Strategic Plan (2018-23); University of Toronto Towards 2030; University of Toronto Quality Assurance Process.

Consultation Process

Temerty Faculty of Medicine

1. Vice Dean, Research & Health Science Education
2. Vice Dean, Clinical & Faculty Affairs and Associate Vice Provost, Relations with Health Care Institutions
3. Director, Clinical Research & Translation
4. Cognate Department Chairs: Radiation Oncology, Medicine, Physiology, Molecular Genetics, Paediatrics, Laboratory Medicine & Pathobiology, Obstetrics & Gynaecology, Psychiatry, Anesthesiology & Pain Medicine, Pharmacology & Toxicology

Institute of Medical Science

5. Director
6. Executive Committee (including Associate Director, Graduate Coordinators, Curriculum Director)
7. Equity, Diversity & Inclusion Committee (including faculty, staff, students)
8. Faculty – Research
9. Faculty – Curriculum Committee
10. Admissions Committee
11. Graduate Professional Development Members
12. Student, Staff, Alumni & Faculty Engagement Committee
13. Summer Undergraduate Research Program & Recruitment Committee
14. Supervisors, Graduate Diploma in Health Research
15. Students – MSc, PhD, MD-PhD, Graduate Diploma in Health Research, IMS Student Association Co-Presidents
16. Administrative Staff

Current Review: Findings and Recommendations

1. Undergraduate Program(s) N/A

2. Graduate Program(s)

Unless otherwise noted, all bulleted comments apply to all programs reviewed.

The reviewers observed the following **strengths**:

- Overall quality
 - ▶ IMS is distinctive among the many Masters and PhD programs at U of T for its inclusion of basic, translational and clinical faculty from the University and across affiliated hospitals
- Objectives
 - ▶ Programs are globally recognized for their high-quality training in clinical and translational research, offering an impressive diversity of research topics

- ▶ GDipHR is distinctive in its mission to introduce medical students to research; the program provides students a framework for learning research ethics, experimental design, and statistical analysis, while allowing them to conduct their own summer research projects and earn a Diploma degree
- Admissions requirements
 - ▶ Continuity between programs favors student retention, with pathways that attract both local and out of province students to the master's degree, encourage transfers from the master's to the PhD, and provide early research exposure through GDipHR
 - ▶ Presenting the IMS program to U of T undergraduate classes has been identified as an effective recruitment strategy and helps address challenge of recruitment being tied to students' familiarity with faculty
 - ▶ Admissions committee is experienced, diverse, and efficiently evaluates applications on a rolling basis
- Student engagement, experience and program support services
 - ▶ Summer research program serves as an effective pipeline for well-trained students to enter IMS by attracting students from across the country, providing early research experience, and fostering connections to overcome recruitment challenges related to supervisor familiarity
- Quality indicators – graduate students
 - ▶ Professional development program has increased the number of master's students transferring to the PhD program by facilitating industry and biotech connections for experiential learning opportunities; commendable program provides students with a strong alternative career path outside academia while supporting research

The reviewers identified the following **areas of concern**:

- Overall quality
 - ▶ Early GDipHR students lacked in-person laboratory experience due to COVID, and low student participation in the review meeting made it difficult for reviewers to assess the program's effectiveness
- Admissions requirements
 - ▶ Student recruitment for MSc/PhD programs has remained stable despite efforts to increase it, leaving faculty needs unmet
 - ▶ Reviewers note that 20-30% of accepted MSc students struggle to find a supervisor
- Curriculum and program delivery
 - ▶ Emphasis on research over coursework in MSc/PhD program has resulted in very few core courses within the program
 - ▶ IMS is not able to offer all necessary courses due to its broad and interdisciplinary nature, limiting students' access to relevant coursework
 - ▶ Lack of clear communication about available courses and their scheduling makes it difficult for students to take advantage of offerings from other programs
 - ▶ Students face challenges when cross-registering for courses in other programs, limiting access to a broader range of coursework
 - ▶ Difficulty finding faculty willing and able to teach MSc/PhD courses limits course availability for students

- ▶ MSc/PhD students find course planning difficult as some courses listed in IMS calendar and course catalog are reportedly no longer offered
- ▶ Goal of keeping GDipHR to a relatively condensed offering format limits the time students have available for course work and research
- ▶ Students early in their medical training may be overwhelmed by additional workload from the GDipHR program
- Student engagement, experience and program support services
 - ▶ Rules and expectations for MSc/PhD students, such as qualifying exam requirements, PAC meeting frequency, and committee composition, are unclear to both students and faculty
- Student funding
 - ▶ Reviewers note a major concern that students in the Summer Undergraduate Research Program cannot support themselves in Toronto on the current stipend, making financial sustainability a challenge

The reviewers made the following **recommendations**:

- Objectives
 - ▶ Dedicated review of GDipHR recommended, to evaluate its impact on medical students and determine whether it is meeting its goals
- Admissions requirements
 - ▶ Prioritize recruiting undergraduate students into the MSc, to strengthen PhD student enrolment pipeline
 - ▶ Broaden outreach efforts by targeting recruitment at conferences, such as Canadian Neuroscience Meeting and Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS); such efforts may also help enhance the diversity of the student body
 - ▶ Implement clear support mechanisms to help MSc/PhD students find supervisors, including additional guidance for MSc applicants
 - ▶ Provide potential supervisors with access to student application files to facilitate recruitment and matching
- Curriculum and program delivery
 - ▶ Expand MSc/PhD course offerings based on curriculum survey results, ensuring that the “Good Study Design” course remains available while adding new courses in topics such as Bioinformatics, Biostatistics, AI, and Language Processing
 - ▶ Address faculty shortages through joint course offerings with other programs; courses could cover subjects with broad application for many graduate programs
 - ▶ Remove MSc/PhD courses from IMS catalog that are no longer offered to increase transparency and make course planning easier for applicants and students
 - ▶ Facilitate student access to courses in other programs to improve training; doing so may require hiring additional TAs or financial support from IMS
 - ▶ Clear communication about available courses and scheduling will enable students to utilize broader university offerings; course cross-listing could increase the departmental course offerings

- Student engagement, experience and program support services
 - ▶ Clearly define and communicate rules and expectations (e.g., qualifying exams requirements, PAC meeting frequencies, committee composition) for MSc/PhD students and faculty by creating an online student handbook; ensure that students, supervisors, and committee members are provided with this information
 - ▶ Provide additional opportunities for faculty to interact with undergraduates at other Canadian institutions, which could help with recruitment and program awareness
 - ▶ Consider facilitation of course evaluations
- Student funding
 - ▶ Explore ways to provide additional supports for students in the summer research program, including stipend increases or allowing part-time research work as an additional income source; additional support may enhance access and enable a more diverse range of students to participate

3. Faculty/Research

The reviewers observed the following **strengths**:

- Overall quality
- IMS excels at recruiting faculty from affiliated preclinical, clinical, and hospital-based research settings across U of T, including SickKids and Princess Margaret Hospital

The reviewers identified the following **areas of concern**:

- Faculty
 - ▶ Many of faculty members lack training in student supervision, which can lead to challenges for both faculty and students
 - ▶ IMS does not currently have a system to for evaluating the quality of student supervision; concerns about anonymity of evaluations prevent data from being accessible to administration and faculty

The reviewers made the following **recommendations**:

- Faculty
 - ▶ Require training for junior faculty members in student supervision, along with mentorship oversight in their early years, to support supervision quality and prevent future conflicts
 - ▶ Expedite development of strategies to evaluate faculty supervision, ensuring data is accessible while maintaining anonymity

4. Administration

Note: Issues that are addressed through specific University processes and therefore considered out of scope for UTQAP reviews (e.g., individual Human Resources issues, specific health and safety concerns) are routed to proper University offices to be addressed, and are therefore not included in the Review Summary component of the Final Assessment Report and Implementation Plan.

The reviewers observed the following **strengths**:

- Relationships
 - ▶ IMS serves as the home for clinician scientists and of translational research at U of T, fostering great interactions among faculty and students across multiple hospital affiliates
 - ▶ High appreciation expressed by unit stakeholders for the current IMS Director
 - ▶ “Empowerment” is a defining characteristic of current leadership, as recognized by students, administrators, and faculty
 - ▶ Recognition of contributions is highly valued, and changes have improved course offerings and strengthened sense of community
- Organizational and financial structure
 - ▶ Addition of program coordinators working alongside administrators has been indispensable in providing effective support for students
 - ▶ “Extremely strong” IMS administrative team is knowledgeable, efficient, proactive, and highly motivated
- Long-range planning and overall assessment
 - ▶ Many recommendations from previous review have been implemented; IMS is currently functioning effectively
 - ▶ Strategic planning recommended in previous review, which involved major changes described by the Director as “disruptive innovation,” has been successfully implemented; both students and faculty are pleased with the new approaches
 - ▶ IMS has implemented key changes from previous review recommendations, including a strategic retreat, enhanced Executive Committee input, increased transparency in processes, and curriculum, all of which have been well received by the community and enhanced student experience and training
 - ▶ IMS is the largest translational program of its kind in Canada and a recognized international leader in graduate education, with a diverse range of degrees that support recruitment and retention

The reviewers identified the following **areas of concern**:

- Long-range planning and overall assessment
 - ▶ Issues from previous review that remain a concern include student challenges enrolling in courses from other programs, difficulties increasing recruitment and diversity, and insufficient communication of degree rules and expectations
 - ▶ EDI committee lacks access to race and ethnicity data, as the University does not easily allow for its collection and sharing

- ▶ EDI committee reports that implicit bias, and the exclusion of diverse backgrounds and perspectives in recruitment and admissions processes, present significant challenges
- ▶ Reviewers note that efforts to recruit or support Indigenous students and address issues pertaining to the Indigenous community were not addressed

The reviewers made the following **recommendations**:

- Organizational and financial structure
 - ▶ Next IMS Director will need to be able to unite the community, empower both students and faculty, and navigate the complex University structure
 - ▶ Consider additional support for hybrid working arrangements
 - ▶ Update job descriptions to recognize the major contributions of the administrative team
- Long-range planning and overall assessment
 - ▶ Consider strategies for attracting scientists from other disciplines, such as engineering, to foster interdisciplinary collaborations
 - ▶ Expand partnerships with other faculties to enhance research opportunities, program growth, and new program development
 - ▶ Create associate memberships for faculty from other disciplines to strengthen cross-campus research interactions
 - ▶ Explore ways to support data collection efforts to strategically enhance diversity among students and faculty and improve access to training opportunities for Indigenous people
 - ▶ Leverage existing full-time and part-time summer research internships as a strategy to enhance future diversity of the student body
 - ▶ Use recruitment through the summer research program, including part-time positions, as a strategy to promote EDI
 - ▶ EDI committee would benefit from enhanced support and resources for student outreach, and for efforts to strengthen recruitment and admissions processes to ensure that they “value the differences and the positive aspects that diversity brings to the university”
 - ▶ Develop and report on efforts to recruit and support Indigenous students
 - ▶ Develop strategies for addressing issues pertaining to the Indigenous community, ensuring that EDI and Indigenous initiatives are treated as distinct efforts
 - ▶ Expand existing course offerings, strengthen EDI initiatives, and enhance pilot programs for recruiting clinical scientists to maintain IMS’s position as a leading clinical and translational graduate program worldwide

2 Administrative Response & Implementation Plan

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TEMERTY FACULTY OF MEDICINE
UNIVERSITY OF TORONTO

Temerty
Medicine

Office of the Dean

March 17, 2025

Professor Nicholas Rule
Vice-Provost, Academic Programs
Division of the Vice-President & Provost
University of Toronto

Dear Professor Rule,

UTQAP Review of the Institute of Medical Science | Dean's Cover Letter

On behalf of the Temerty Faculty of Medicine at the University of Toronto, we would first like to thank the external reviewers—Dr. Tara Beattie, Dr. Anne-Marie Lauzon, Dr. Rosalind Segal—for their comprehensive review of the Institute of Medical Science (IMS) last spring (April 11-12, 2024). We would also like to thank Dr. Mingyao Liu, IMS Director, the administrative staff and all those who contributed to the preparation of the outstanding self-study report. We also wish to thank the many staff, students and faculty who met with the external reviewers and provided thoughtful feedback. The reviewers noted that *“nationally, IMS is the largest translational program of its kind and is certainly an international leader in graduate education...at the top of the clinical and translational graduate programs worldwide.”*

The thorough report of the reviewers serves as a fruitful guide for program enrichments and future strategic directions at IMS. The reviewers identified areas for enhancement, including course offerings and evaluations, communications, interdisciplinary collaboration, inclusive recruitment and pairing of students with supervisors; and they recommended a distinct focussed review of the Graduate Diploma in Health Research. Priorities identified by your office have been addressed in the accompanying table's Unit Response column and in the Director's Cover Letter. We are in full agreement with Prof. Liu's response, on behalf of IMS, and offer additional comments in the Deans' Response column of the table.

We are proud of the calibre and scope of IMS's medical research and its exemplary position in Canada for bringing students into clinical settings. We congratulate Prof. Liu and his leadership team for building upon IMS's successes during his term as Director: *“world renowned”* training and the *“impressive diversity of research topics”* it offers. We look forward to working with the next Director and members of IMS in support of its continued growth and attainment of strategic and operational aspirations.

The next UTQAP review of IMS is planned for 2028-29. In 2026-27 we will follow up with the Director on the implementation of the external reviewers' recommendations and, upon request, provide you with an interim monitoring report.

Sincerely,

Lisa A. Robinson, MD, FRCPC, FASN, FCAHS
Dean, Temerty Faculty of Medicine
Vice Provost, Relations with Health Care Institutions

cc: Justin Nodwell – Vice Dean, Research & Health Science Education
Anastasia Meletopoulos – Academic Affairs Manager, Office of the Dean
Lachmi Singh – Director, Academic Programs, Planning & Quality Assurance, Office of the Vice Provost, Academic Programs
Mingyao Liu – Director, Institute of Medical Science
Lucy Osborne – Associate Director, Institute of Medical Science

2023-24 UTQAP Review of MED Institute of Medical Science - Review Recommendations

Please do the following for each recommendation in the table:

- If you **intend** to act on a recommendation, please provide an **Implementation Plan** identifying actions to be taken, the time frame (short, medium, long term) for each, and who will take the lead in each area. If appropriate, please identify any necessary changes in organization, policy or governance; and any resources, financial and otherwise, that will be provided, and who will provide them.
- If you **do not** intend to act on a recommendation, please briefly explain why the actions recommended have not been prioritized.
- In accordance with the UTQAP and Ontario's Quality Assurance Framework, "it is important to note that, while the external reviewers' report may include **commentary** on issues such as faculty complement and/or space requirements when related to the quality of the program under review, **recommendations** on these or any other elements that are within the purview of the university's internal budgetary decision-making processes must be tied directly to issues of program quality or sustainability" (emphasis added)
- You may wish to refer to the [sample table](#) provided by the Office of the Vice-Provost, Academic Programs

Request Prompt <i>verbatim from the request</i>	Rec. #	Recommendations from Review Report <i>verbatim from the review report</i>	Unit Response	Dean's Response
The reviewers raised a number of concerns regarding IMS course offerings and student course enrolment. They noted challenges finding appropriate faculty to teach IMS courses and highlighted the limited range of courses available to students due to the small number of IMS core course offerings and difficulty registering in courses offered by other units. They recommended improving communication regarding the Institute's course inventory and timing of course offerings and working with other units to facilitate enrolment in non-IMS courses.	1.	<i>"Because the IMS is purposefully a broad and interdisciplinary program, it is impossible for IMS to offer all the courses that would benefit the students. Therefore, facilitating access to courses that have been developed by other programs is needed to improve the training; this may require hiring additional TAs or other financial commitment by IMS. Clear communication about available courses, and when they are offered will enable students to make use of the broader university community. Course cross-listing could increase the departmental offerings."</i>	We continue to strive to build additional content for our students through new courses inside of IMS and collaborations with other departments. We have ongoing negotiations with the Leslie Dan Faculty of Pharmacy to build capacity for training in qualitative research (6-12 months) and are exploring strategies to augment the integration of artificial intelligence and data-driven approaches in medicine into IMS programming (e.g., with a new Collaborative Specialization (1-2 years). We are committed to expanding curricular opportunities for our students and are happy to provide TA support or other financial commitment where needed to allow access to course hosted by other graduate units.	IMS has been proactive about sharing courses they have created with other academic units. For example, they implemented a novel approach whereby other departments can pay the salary of a 0.5 TA so that their students can take part in their course offerings. This has generated considerable good will and it is anticipated that the collaborations will lead to increased opportunities for learners over the next few years.
	2.	<i>"Finding the appropriate faculty willing and able to teach these courses is a challenge. Potentially these could be offered jointly by IMS and other programs, as these subjects are needed for many graduate programs."</i>	IMS has been leading activities across the Office of the Vice-Dean, Research & Health Science Education to 'share' content amongst the graduate programs under the RHSE umbrella. Our first foray was to open our	There is an ongoing commitment to sharing courses amongst graduate courses across Temerty Medicine and there will be a continued commitment to creative approaches. Continued innovation in this

		<i>Additional efforts for cross-program course work would be likely to benefit IMS and other programs as well.”</i>	‘Learning From Data’ course to students from any of the programs. This was the first initiative of its kind in RHSE and serves as a jumping off point for additional opportunities. We believe this will be a fruitful strategy to increase access to content and reduce administrative burden on departments and students.	area is likely a short term and continuing long-term objective.
	3.	<i>“An administrative issue that makes course planning difficult for students is that some courses have been on the IMS calendar and in the course catalog for several years but are reportedly not offered. If courses have not been offered over a three-year period, perhaps they can be removed from the catalog to increase transparency for applicants and students.”</i>	Due to the specificity of some IMS courses, they are only offered every 2-3 years. While this is the case in a select few cases, IMS notes this suggestion and will work diligently to ensure that student-facing information is accurate and up to date.	This is a common practise across our graduate units. Indeed, many graduate courses do not attract sufficient numbers to be run annually. Having said that, the Office of the Vice Dean, Research & Health Science Education will work with IMS to ensure that their students have sufficient course offerings in their discipline year over year.
The reviewers noted ongoing challenges related to recruiting enough MSc and PhD students to meet the needs of program faculty members; they made several recommendations for broadening outreach efforts to increase the applicant pool and suggested that IMS discuss future strategies related to recruitment and program size.	4.	<i>“One of the issues raised by the previous review is that there are not enough students recruited for the needs of the program faculty. While efforts have been made in that direction, the total number of students has been maintained at a constant level. A discussion of Canada and Toronto’s need for well-trained scientists might provide a goal for future program size.”</i>	After the previous review, IMS created a Recruitment Committee that has made intentional efforts to increase outreach and boost student applicant numbers and geographic spread. Our intake numbers have held steady, in contrast to many other graduate departments, and recent application numbers for January and September 2025 suggest they are now increasing. We are not aware of any faculty in recent years who have expressed interest in taking a student but have not found one.	This is true across the board in the Temerty Faculty of Medicine, in spite of efforts to the contrary. For example, the Office of the Vice Dean, Research & Health Science Education has implemented geo-targeted, age-directed advertisements for programs aimed at attracting students in undergraduate programs at Canadian universities. The net effect, however, has been modest. Furthermore, stagnant grant funding from federal funding agencies limits the number of students programs can take; Temerty Medicine operates on a harmonized stipend agreement that is the highest in Canada. This limits the number of students we can take.
	5.	<i>“As many of the top master’s students transfer to the PhD program, or apply and are admitted after completing the master’s, a focus on recruiting undergraduates to enroll in the master’s program seems like a beneficial strategy.”</i>	Undergraduate recruitment into the doctoral-stream program at the MSc level is our main recruitment strategy.	This is a common approach at Temerty Medicine.

	6.	<i>“Other approaches to broaden the outreach might include targeted recruitment at conferences in areas such as neuroscience (ie Canadian Neuroscience meeting), and at conferences such as ABRCMS. These approaches might also enhance the diversity of the student body.”</i>	We appreciate the suggestions for broadening student diversity. Representation at conferences such as ABRCMS may be very fruitful, although we think this would be appropriate at the RHSE level to showcase all Temerty Medicine graduate programs.	Faculty-wide initiatives aim to address this. Efforts include targeting potential students through Instagram and other online platforms, as well as holding a Faculty-wide Graduate Recruitment Fair every autumn.
The reviewers reported hearing that many students in the Summer Research program struggle to financially support themselves in Toronto on the current program stipend. They recommended exploring options for providing additional support for students and opined that this could potentially enable a more diverse range of students to participate in the program.	7.	<i>“A major concern is that students are not able to support themselves in Toronto on the current stipend. The two potential solutions are to increase the funds per student, or to allow part time summer research work so students could have additional sources of income.”</i>	SURP is an important gateway for prospective graduate students to connect with IMS programs and faculty and affordability has been an ongoing concern for the program’s leadership. This year Temerty Medicine has introduced a minimum summer student stipend equivalent to the the current minimum wage for Ontario and in line with stipends offered by affiliated hospital research institute summer programs.	Temerty Medicine has recently harmonized stipends, based on minimum wage and benefits, for summer undergraduate research programs across departments. This will significantly increase funds for students. Given federal funding, IMS is not able to increase the funds appreciably at this time.
	8.	<i>“Summer research internships, both full and part time, could be used as a vehicle for enhancing the future diversity of the student body.”</i>	This year we have offered part-time summer research opportunities to students who are Indigenous, members of visible minorities or of lower socioeconomic status, in partnership with the Research Application Support Initiative.	Efforts through Temerty Medicine’s Office of Inclusion & Diversity , working in tandem with academic units, address this concern. The School of Graduate Studies demographics dashboard indicates that Temerty Medicine’s student body is diverse, representing all demographics in Ontario. As in many programs, however, students from Black and Indigenous backgrounds remain significantly under-represented. Specific, targeted efforts at Temerty Medicine are striving to redress this. The Office of Access & Outreach and the Office of Indigenous Health have developed new outreach programs in which undergraduate students complete summer research electives with PIs across Temerty Medicine. These programs also include longitudinal programs throughout the school year.
The reviewers observed several concerns related to graduate student supervision, noting that a significant proportion of MSc	9.	<i>“Putting in place clear mechanisms that provide additional help and advice for master’s applicants and students so that they can more easily connect with potential</i>	Student-supervisor matching is a challenge. We have a dedicated web page where we post a regularly updated list of faculty looking for students (with brief project descriptions),	The approach taken by IMS is comparable to other programs that do not have graduate rotation mechanisms. A review of recruitment, application and enrollment is

<p>and PhD students experience challenges finding a supervisor and that many faculty members do not receive specific training in supervision. They recommended considering additional supports to help applicants and students connect more easily with potential supervisors, and to help faculty members regarding the expectations and requirements for student supervision.</p>		<p><i>supervisors would be very beneficial for the program. Giving faculty members access to student application files could also facilitate the recruitment.”</i></p>	<p>tips and a recorded workshop to help students through the process. We also introduced two new Student Ambassadors who are available to answer questions from applicants as well as current students. We have discussed opening up applicant files to interested faculty; however they would only be able to access these secure files via their UTORid, which most do not use or even know, since they are off-site.</p>	<p>anticipated for 2025-26, again, at the Faculty level.</p>
	10.	<p><i>“The rules and expectations for the students in the various programs are not clear to all the students or all the faculty. These include the requirements for qualifying exam, frequency of PAC meetings, number of members, etc. These issues need to be clearly defined in a student handbook available online and made clear to faculty when they accept a student.”</i></p>	<p>The IMS requirements are provided to students through an orientation session; all the details for successful completion of their academic program are available to both students and faculty through a comprehensive on-line Student Handbook. IMS has also developed a comprehensive International Student Welcome Guide and a New Faculty Welcome Guide that outlines the responsibilities for new IMS members, with a Quick Guide to Supervision also available online.</p>	<p>IMS is well known as a popular destination for talented students in the biomedical field, in large part due to recruitment mechanisms including the Graduate Recruitment Fair organized by the Office of the Vice Dean, Research & Health Science Education.</p>
	11.	<p><i>“Training for junior faculty members should be a requirement along with supervision of these mentors for the first years. This would help prevent disagreements and student challenges that are difficult to deal with after the fact.”</i></p>	<p>IMS has identified a need for mentorship and is currently developing a ‘College of Mentors’ that will allow new members to reach out to a cadre of IMS faculty with graduate supervisory experience for advice. The ‘staged’ membership progression from ‘Associate Member Restricted to PACs’ to ‘Associate Member’ to ‘Full Member’ also provides individual faculty engagement with students with appropriate levels of responsibility and the opportunity to become familiar with IMS requirements.</p>	<p>This is a laudable objective and we recommend implementation over the next 6-12 months.</p>
	12.	<p><i>“Expediting the strategies for evaluation of faculty supervision would also be helpful across the University.”</i></p>	<p>We agree with this and welcome suggestions about such evaluations from the wider University community.</p>	<p>There is an existing mechanism at Temerty Medicine. The Graduate Supervisory Experience Survey has been in place for 5 years. Overall, IMS scores very well and there have been no red flags or issues identified related to faculty supervision.</p>

<p>The reviewers recommended that IMS explore strategies to strengthen its connections with a broader range of University divisions so as to foster interdisciplinary collaborations and expand opportunities for future program growth.</p>	13.	<p><i>“It would be helpful if the new leadership could develop a new program to attract other types of scientists such as engineers, for example, to favor collaborations. Because there is a critical mass of neuroscientists at IMS, courses, facilities, and collaborations have been developed for imaging, statistical analysis and epidemiological studies oriented towards neuroscience. Collaborations with other faculties, such as engineering, could increase interactions with researchers across campus and thereby greatly enhance opportunities for program growth and/or new program development. These collaborations could be made stronger by creating associate membership for these other professors.”</i></p>	<p>IMS is cognizant of the benefits of attracting faculty from other disciplines into the unit as supervisors and advisory committee members to provide different opportunities for our students. IMS has recently joined two Collaborative Specializations: Neuromodulation (in collaboration with five Engineering departments) and Psychology, Psychiatry and Engineering (in collaboration with four departments in the Faculty of Applied Science & Engineering and the Dept. of Psychology). Although these both include neuroscience content, they encompass many courses and faculty from the hosting Faculty of Applied Science & Engineering. As indicated above, we are also planning another CS that will involve the Dept. of Computer Science.</p>	<p>Interdisciplinary research and training are a priority at Temerty Medicine; the graduate scope of IMS lends itself well to interdisciplinary collaboration.</p>
<p>The reviewers highlighted EDI committee concerns regarding perceived bias in admissions processes; they recommended providing additional support for the committee to work with the IMS recruitment and admissions committee to ensure that diverse backgrounds and perspectives are considered. The reviewers further recommended additional support for the EDI committee to enhance student and faculty outreach initiatives.</p>	14.	<p><i>“The EDI committee reports that one of their biggest problems is implicit bias, and the exclusion that occurs because faculty do not always value diverse backgrounds and perspectives. Thus, the EDI committee needs more support for their outreach to students and for their work with the recruitment and admissions committee to value the differences and the positive aspects that diversity brings to the university.”</i></p>	<p>We acknowledge that implicit bias remains a challenge and recognize the importance of fostering an institutional culture where diverse backgrounds and perspectives are valued. We are implementing structured student-focused initiatives, including mentorship programs, digital engagement tools and targeted recruitment strategies in collaboration with the Student Recruitment and Admissions committees. EDIIA awareness will be incorporated into the faculty appointment renewal process, providing structured opportunities for engagement.</p>	<p>Medium term (1-2 years). Excellence Through Equity is one of the three pillars in Temerty Medicine’s strategic academic plan. Implicit bias training and other educational resources have been in place at Temerty Medicine for several years. As we head into a new round of strategic planning, we will continue to ensure that efforts to address implicit bias are aligned across departments and programs.</p>
	15.	<p><i>“Building on to the currently existing courses to increase the offering, on the current efforts to further favor EDI, and on the pilot programs to further recruit clinical scientists, will continue to place IMS at the top of the clinical and translational graduate programs worldwide.”</i></p>	<p>We remain committed to strengthening course offerings by embedding EDIIA principles into curriculum development, student engagement and academic programming. Our EDIIA Strategic Plan outlines a phased approach that includes pilot workshops, interdisciplinary collaborations and increased mentorship opportunities for underrepresented students.</p>	<p>Medium term (1-2 years). This is a Faculty-wide objective.</p>

			Additionally, we are implementing internal structural adjustments to facilitate faculty involvement in EDIIA mentorship initiatives, reinforcing their role in fostering an inclusive academic experience	
The reviewers noted that there may be opportunities to enhance efforts related to recruitment and support for Indigenous students, emphasizing the distinction between EDI efforts and supports specific to Indigenous communities.	16.	<i>“The reviewers noticed that there was no report on efforts to include/recruit Indigenous students and/or addressed any issues pertaining to the Indigenous community. The reviewers want to emphasize that EDI and Indigenous community should not be seen as the same.”</i>	Recognizing the distinct needs of Indigenous students and the importance of accessibility, we are undertaking a structural transition from the EDI Committee to the EDIIA Committee. We are establishing Indigenous-focused recruitment strategies, mentorship programs and community engagement initiatives, alongside targeted efforts to remove barriers related to accessibility and disability inclusion.	Medium term (1-3 years). Temerty Medicine’s Office of Indigenous Health is dedicated to recruiting Indigenous students into our various program. While Indigenous representation across clinical medicine and medical science remains low across the country, Temerty Medicine is committed to addressing the gaps through its expanded Office of Indigenous Health, which is distinct from the Office of Inclusion & Diversity.
The reviewers recommended conducting a focused review of the Graduate Diploma in Health Research, to evaluate its impact on students and assess whether it is fulfilling its intended purpose.	17.	<i>“A separate evaluation of the Graduate Diploma is needed to make sure that this program is accomplishing its purpose. Given the issues with COVID and the lack of student participation in this review, we cannot assess the success of this pilot.”</i>	IMS has discussed this with the GDipHR Director; we agree that a separate review of the program should be carried out.	Medium term (1-2 years). The GDipHR , jointly offered between the MD Program and IMS, is an exclusive opportunity for first-year students in the MD Program to participate in the continuum of research through a consecutive 20-month program.
Other recommendations not prioritized in the Request for Administrative Response	18.	<i>“Evaluation of courses should also be facilitated.”</i>	IMS currently carries out evaluation of each of our courses on an annual basis, but often only a small number of students provide feedback. We will explore ways of improving student participation in course evaluation.	This is a Faculty-wide challenge.
	19.	<i>“University wide efforts at data collection would enable a more thoughtful approach to enhancing diversity among the students and faculty and enabling greater access to training for Indigenous people. This is likely to require additional administrative support.”</i>	We agree that this is an effort that is best managed at a Faculty or University level.	There is an existing demographics dashboard in the School of Graduate Studies, which meets our current needs.

3 Committee on Academic Policy & Programs (AP&P) Findings

The spokesperson for the reading group reported that the review summary had accurately reflected the full review, and that overall, they had found the review to be positive, noting that the program provided “world renowned” training in an “impressive diversity of research topics.” However, the reading group noted that the reviewers were not able to give a fulsome review of the Graduate Diploma program due to the attendance of only one student during the consultation process, therefore recommended that an additional review of the program take place. The reading group reported that the Dean’s administrative response did not adequately address the issues identified and did not align with the Unit’s response, and asked the Faculty to further comment on a number of matters which included how the review took place, failed recruitment efforts to generate more applicants and widened geographic spread, data collection and evaluation of faculty supervision data and demographic data, lack of communication surrounding rules and expectations in various programs for students and faculty, and evaluation of the success of the graduate diploma.

Justin Nodwell, Vice-Dean, Research & Health Science Education responded that regarding the demographic data, it was attributed to a lack of awareness and that the demographic data dashboard was processed through the School of Graduate Studies (“SGS”). He explained that he had spent a lot of time reviewing the data, but not in the context of IMS.

Regarding the evaluation of the success of the graduate diploma, Professor Nodwell noted that the IMS was a unique and established program of the graduate unit, enabling faculty to supervise graduate trainees (MD and non-MD) in a formal and high-quality program. He acknowledged that the Dean’s response did not address several points in the review, and that there was a planned review for the Graduate Diploma in Health Research (“GDipHR”) program.

Regarding the evaluation of faculty supervision data, Professor Nodwell noted this oversight, that there had been a graduate supervision review for all the basic sciences in medicine for the past five years. This was an annual exercise which included IMS, and where IMS scored well. He added that both the faculty-wide results were shared in an anonymized form with all departments, as well as the specific departmental review.

Regarding recruitment, this was an area of concern as their focus was to recruit the best students and work with many moving targets regarding the funding landscape. There was a harmonized stipend agreement for all of the graduate students, and an upper limit where the number of accepted students was dependent on available funding. There were various supports and resources for Principal Investigators to optimize their success, and recruitment numbers fluctuated year-over-year.

Regarding how the review took place, Professor Nodwell confirmed that the review was conducted virtually.

Mingyao Liu, Director, Institute of Medical Science responded that he was committed to make the adjustments as recommended in the review. Although they requested an in-person review, it was virtual due to the previous year's circumstances. He explained that due to poor coordination between the organizer and students, this led to a disconnect where only one student attended the Graduate Diploma program consultation review, and a separate review for this program would be organized.

Regarding recruitment, Professor Liu commented that both a special recruitment committee, and an admission committee had the mandate of increasing the quality of the students by focusing on academic excellence and EDI. Supports were being explored to help students from outside the province or other institutions to find a supervisor. The harmonized stipend had been increased in the last five years, approximately \$10,000 for each student. The operational cost for each year was over \$5 million to maintain the current number of students, impacted by economic challenges of low funding and high cost of living.

Professor Nick Rule added that it was permissible to have a virtual visit, but that in-person review site visits were strongly encouraged.

A one-year follow-up was requested on the status of the GDipHR review.

4 Institutional Executive Summary

The reviewers praised IMS as the largest translational program of its kind in Canada, providing world-renowned training and offering an impressive diversity of research topics. They applauded the Institute's responses to recommendations from the previous UTQAP review, which included curriculum modifications and increased transparency of processes, noting that the changes have been well received by the community and have enhanced the experience and training for students. They commended the Graduate Diploma program's unique mission of equipping medical students with skills in research methods, statistical analysis, and research ethics. The reviewers also highlighted the Institute's strength in its diverse faculty, which includes University preclinical and clinical faculty as well as those based in local research hospitals. Finally, they praised the strong, positive relationships between students, faculty, and staff at IMS, emphasizing the culture of empowerment fostered by the Director and current leadership.

The reviewers recommended that the following issues be addressed: exploring ways to address challenges finding appropriate faculty to teach IMS courses, improving communication regarding the Institute's course inventory and timing of course offerings, and working with other units to facilitate enrolment in non-IMS courses; broadening outreach efforts to increase the applicant pool and discussing future strategies related to recruitment and program size; exploring options to increase financial support for students in the Summer Undergraduate Research program and enhancing the diversity of participating students; implementing additional supports to help applicants and students connect more easily with potential supervisors and assisting faculty in understanding expectations and requirements for student supervision; exploring strategies to strengthen connections with a broader range of University

divisions and units, to foster interdisciplinary collaborations and expand opportunities for future program growth; providing additional support for the EDI committee to enhance student and faculty outreach initiatives; ensuring diverse backgrounds and perspectives are considered in recruitment and admissions processes; enhancing efforts to recruit and provide support for Indigenous students; and conducting a focused assessment of the Graduate Diploma in Health Research to evaluate its impact on students and assessing whether it is fulfilling its intended purpose.

The Dean's Administrative Response describes the unit's responses to the reviewers' recommendations, including an implementation plan for any changes necessary as a result.

5 Monitoring and Date of Next Review

In 2026-27, the Dean will follow up with the Director of the Institute of Medical Science on the implementation of the external reviewers' recommendations and will provide an interim report upon request from Vice-Provost, Academic Programs on the status of the implementation plans. The next UTQAP review of IMS will be commissioned in 2028-29.

6 Distribution

On August 15th 2025, the Final Assessment Report and Implementation Plan was posted to the Vice-Provost, Academic Programs website and the link provided by email to the Dean of the Temerty Faculty of Medicine, the Secretaries of AP&P, Academic Board and Governing Council, and the Ontario Universities Council on Quality Assurance. The Dean provided the link to unit/program leadership.