Western UNIVERSITY · CANADA

Pathology and Laboratory Medicine
Final Assessment Report & Implementation Plan
August 2026

Faculty / Affiliated University College	Schulich School of Medicine & Dentistry	
Degrees Offered	Master of Science (MSc), Doctor of Philosophy (PhD), Graduate Diploma (GDip)	
Date of Last Review	2017-2018	
Fields of Study	Molecular Pathology and Transplant Pathology Neuropathology Oncology and Environmental Pathology One Health	
External Reviewers	Dr. Judy West-Mays Professor, Department of Pathology and Molecular Medicine McMaster University	Dr. Carolyn Baglole Associate Professor, Department of Medicine McGill University
Internal Reviewers	Dr. Zoë Sinel Associate Dean Faculty of Law	Colleen Van Loon PhD Student Health and Rehabilitation Sciences
Date of Site Visit	March 12-13, 2026	
Date Review Report Received	March 27, 2026	
Date Program/Faculty Response Received	Program Response: May 5, 2026 Faculty Response: July 16, 2026	
Evaluation	Good Quality	
Approval Dates	SUPR-G: September 21, 2026 ACA: October 6, 2026 Senate (for information): October 23, 2026	
Year of Next Review	2033-2034	
Progress Report	June 2029	

Overview of Western's Cyclical Review Assessment Reporting Process

In accordance with Western's Institutional Quality Assurance Process (IQAP), the Final Assessment Report (FAR) provides a summary of the cyclical review, internal responses, and assessment and evaluation of the Graduate Pathology and Laboratory Medicine Program, delivered by the Schulich School of Medicine & Dentistry.

This FAR considers the following documents:

- the program's self-study brief;
- the external reviewers' report;
- the response from the Program; and
- the response from the Dean, Schulich School of Medicine & Dentistry.

This FAR identifies the strengths of the program and opportunities for program enhancement and improvement, and details the recommendations of the external reviewers – noting those recommendations to be prioritized for implementation.

The Implementation Plan details the recommendations from the FAR that have been selected for implementation, identifies who is responsible for approving and acting on the recommendations, specifies any action or follow-up that is required, and defines the timeline for completion.

The FAR (including Implementation Plan) is sent for approval through the Subcommittee on Program Review - Graduate (SUPR-G) and the Senate Committee on Academic Curriculum and Awards (ACA), then for information to Senate and to the Ontario Universities' Council on Quality Assurance. Subsequently, it is publicly accessible on Western's IQAP website. The FAR is the only document from the cyclical review process that is made public; all other documents are confidential to the Department of Pathology and Laboratory Medicine, the Schulich School of Medicine & Dentistry, the School of Graduate and Postdoctoral Studies (SGPS) and SUPR-G.

Executive Summary

The Department of Pathology and Laboratory Medicine is a unique department within the Schulich School of Medicine & Dentistry in that it is both a clinical and basic science department. The Department offers MSc and PhD thesis-based degrees, both as part-time and full-time programs, to students who are interested in developing a more extensive understanding of the mechanisms and drivers of disease, and patterns of disease emergence. The Pathology MSc program is designed to introduce students to the research process and to train them in obtaining elementary research skills. Students learn how to pose a relevant scientific question; determine the most appropriate methodology (technology) to answer that question; and master the methodology to answer the question posed. The Pathology PhD program is designed to train students beyond mastering basic technical skills so that they exhibit a greater degree of independence and originality in their thesis work. In addition, it offers a one-

year GDip program in Pathology, which was launched in September 2020. The One Health research field is managed by the Department of Pathology and Laboratory Medicine and involves participation from the Faculties of Science, Social Sciences, Arts and Humanities, Engineering, and Health Sciences at Western University. The goal is to develop future leaders in Canadian healthcare with skills necessary to utilize a One Health systems approach. Total enrolment in 2025 was at 31 in the MSc, 17 in the PhD and four in the GDip.

The self-study was informed by a survey to faculty and staff, a student focus group and a faculty focus group which served as fora for broad consultation and data collection.

The external reviewers shared a positive assessment of the Graduate Pathology and Laboratory Medicine Program. They offer eight recommendations with considerations for further enhancement.

Strengths and Innovative Features Identified by the Program

- The distinctive interdisciplinary structure brings together basic scientists, clinicians, and diverse pathology-related disciplines, supporting multidisciplinary collaboration and the integration of molecular, experimental, and clinical perspectives
- Flexible and light course requirements give students time to develop expertise in their individual research areas while still gaining exposure to a wide range of pathology topics.
- Access to specialized equipment, animal models, clinical resources, and diverse research projects, including opportunities to translate basic science findings into clinical applications.
- Approachable leadership, supportive administrative staff, effective communications, and a relatively small, tight-knit community.
- Recently established Pathology Commons supports informal interaction, cross-disciplinary dialogue, wellness, mindfulness, and multi-faith needs.

Concerns and Areas of Improvement Identified and Discussed by the Program

- Student stipends, particularly at the MSc level, are seen as inadequate relative to living costs. Equally, students indicate a lack of clarity regarding the funding model.
- The Scientific Communication and Critical Thinking (SCCT) was viewed as overly long and unevenly relevant; suggestions included remote participation, clearer first-year expectations, moderated discussions, and more discipline-specific content.
- Students requested more structured instruction in foundational laboratory and safety skills, professional software, communication for lay audiences, and skills applicable beyond individual research laboratories.

- The breadth of research areas and distribution of students across multiple sites can inhibit collaboration, community-building, seminar participation, and access to activities held on the main campus.
- Limited preparation for non-academic careers.

Review Process

As part of the external review, the review committee, comprising two external reviewers, one internal reviewer and a graduate student reviewer, were provided with Volume I and II of the self-study brief in advance of the scheduled review and then met in-person over two days with the:

- Vice-Provost, Graduate & Postdoctoral Studies
- Associate Vice-Provost, Graduate & Postdoctoral Studies
- Vice-Provost, Academic Planning, Policy & Faculty
- Director of Academic Quality and Enhancement
- Administrative Coordinator, School of Graduate and Postdoctoral Studies
- Western Libraries Team Members
- Associate Dean Graduate and Postdoctoral Studies, Schulich School of Medicine & Dentistry
- Department Chair
- Chair/Physician Department Executive
- Graduate Education Committee Members
- Program Faculty Members
- Graduate Program and Departmental Staff
- Graduate Students

Following the site visit, the external reviewers submitted a comprehensive report of their findings which was sent to the Program and Decanal Office for review and response. Formative documents, including Volumes I and II of the Self-Study, the External Report, and the Program and Decanal responses form the basis of this FAR. The FAR is collated and submitted to SUPR-G by the Internal Reviewer with the support of the Office of Academic Quality and Enhancement.

Summative Assessment – External Reviewers' Report

External reviewers shared that "*the MSc and PhD graduate program in Pathology and Laboratory Medicine at Western University is strong and provides students with rigorous academic and scientific training in key areas of disease-focused research*."

Strengths of the Program:

- Faculty expertise spans diverse areas of disease-focused research, allowing students in a relatively small program to gain knowledge beyond their thesis specialization and benefit from multidisciplinary perspectives.

- Strong faculty competence in research, teaching, supervision, knowledge dissemination, scholarly productivity, and research funding; evident collegiality was also linked to students' positive perceptions of the program.
- New faculty expertise in bioinformatics and the development of the Medical Bioinformatics stream provide sought-after computational training and enhance graduates' competitiveness.
- Administrative support was highly regarded by students and faculty.
- Emphasis on scientific communication skills through seminar and journal club.

Prospective Areas of Improvement for the Program to Consider

- Further development and advertising of the Medical Bioinformatics stream.
- Need for a centralized core equipment unit; completion of the planned core facilities was expected to enhance students' scientific training.
- Student financial support was clearly documented, but the reviewers flagged the treatment of stipend top-ups for holders of CGS-D scholarships as an area requiring change.
- Withdrawal rates of 11.9% for MSc students and 18.9% for PhD students considered somewhat high.
- Supports for students regarding post-degree opportunities.
- Examination of and possible strategy to help mitigate gender imbalances among faculty and students.

Summary of the Reviewers' Recommendations and Program/Faculty Responses

The following are the reviewers' recommendations in the order listed by the external reviewers.

Reviewers' Recommendation	Program/Faculty Response
Recommendation #1: One Health Stream and Possible MBI Stream Reevaluate One Health remaining within the Department of Pathology Graduate program, but instead, positioned within a broader graduate program such as the proposed School of Public Health. Further efforts could be directed to build the MBI stream that is supported by current faculty (with strength) and highly sought after by students. This latter initiative was considered a strength by the reviewers and would elevate the program and its research component.	**Program:** While we agree with the reviewers that Medical Bioinformatics is a major strength and deserves further elevation, it is not currently a research stream/field within the graduate program of Pathology and Laboratory Medicine. We will internally circulate a proposal for Medical Bioinformatics (MBI) to be introduced as an additional Research Field in the PaLM graduate program. If this proposal has sufficient support in the department, then we will proceed to submit an application for a modification to the program. Transferring the One Health research field to another administrative unit is not currently feasible and may reflect a misunderstanding of what constitutes a research field. PaLM has invested dedicated funding, awarded a One Health scholarship, and supports two enrolled students whose funding and research continuity could be disrupted by a transfer. The department will reassess its research fields at the mid-cycle review. Meanwhile, Epidemiology and Biostatistics could develop a distinct One Health stream or program with its own learning outcomes, curriculum mapping, asset review, faculty expertise assessment, and feasibility analysis. **Faculty:** The decanal team supports the program's response. The decanal team is available to assist with any program modification. With respect to the One Health field, having two different One Health fields offered by two different graduate programs may not be the best use of resources and could be confusing for prospective students. The decanal team will support conversations with the relevant programs' leadership to determine an optimal model (e.g., interdisciplinary program in One Health).

Recommendation #2: Clarity Regarding Student Funding Enhancements are needed for incoming and current students to clearly understand the funding package and GTA commitments. This could be made clearer in the offer letters (scenarios outlined if they are to obtain scholarships). We also recommend that those with external national scholarships at the CGS-D level, also receive a percentage top-up (above the 40K) to incentivize students to apply for these external awards. It is further recommended that the department consider implementing a peer-review session/committee for evaluating student applications to boost success and aid in crafting grant applications.	**Program:** While all Program Offer Letters (called welcome letters) must adhere to a strictly approved institutional template, the department will prepare an addendum for each offer to clearly illustrate the financial package. To further support this, we will evolve our current orientation practices. Currently, the department hosts an initial information session on funding and scholarships during the first installment of the Scientific Communication and Critical Thinking (SCCT) milestone in September. We plan to dissect this session, enhance its content, and launch it as a standalone 'financial literacy workshop' required for all incoming graduate students to ensure they have a comprehensive understanding of their funding throughout the duration of their studies. Regarding the reviewers' concerns about scholarship incentives, the PaLM Research-Based Graduate Education Committee will formally revisit the departmental graduate funding model with a specific focus on introducing a 'top-up' for students receiving external scholarships of $40,000 or more, ensuring that high-achieving students are appropriately rewarded for securing national-level funding. Finally, to improve the success rates of these applications we will organize a formal workshop for the internal peer review of scholarship applications. **Faculty:** Schulich follows institutional procedures for communicating admission and funding details through SGPS offer letters, program welcome letters, and the Mercury system. The decanal team supports the program's plan for clearer communication about funding packages, scholarship impacts, and appropriate compensation for major external awards. A brief Mercury navigation video will be incorporated into the first-term Introduction to Biomedical Research milestone. The team also supports PaLM initiatives to strengthen scholarship applications and suggests extending relevant supports to postdoctoral fellows and offering faculty workshops on alternative awards, application assessment, and effective reference letters.

Recommendation #3: Curriculum Revisions We recommend that the graduate curriculum be re-evaluated including the content of the required courses and the SCCT milestone component. The course content should meet the criteria for current student needs in today's job market and diversity of the program. If the SCCT continues in its current form as a milestone that at a minimum the required number of sessions attended to pass be clearly indicated and prior access to upcoming journal articles or brief abstract of the student's presentation be provided one week in advance.	**Program:** In alignment with the reviewers' observations, we had already intended to hold a comprehensive retreat for both the undergraduate (BMSc) and research-based graduate programs for the 2026-2027 academic year to facilitate deeper curricular discussions. We aim to harmonize elements that naturally complement one another, such as pairing the SCCT milestone with PATHOL 9687A (Effective Proposal Writing). This core experience will be further enriched by integrating established workshops developed by the Western Pathology Association, such as those focused on poster and journal presentations. However, to respect the diversity of our research programs, which span medical bioinformatics, immunology, biochemistry, and pathology etc., the program will keep foundational course requirements separate while removing the specific restriction on which foundational course a student must take. We intend to prepare a 'Major Modification to an Existing Graduate Program' to implement the merger of SCCT and PATHOL 9687A and redefining the foundational course requirement for 2027 academic year. To specifically address the SCCT milestone, we recognize that greater student and faculty engagement is essential for its success. Consequently, the program is planning a significant revamp of this requirement to move beyond simple attendance. The potential new model involves 'research groups' hosting one to two sessions per year where their students present their research proposals. We will ensure that the revamped milestone clearly defines attendance requirements and participation expectations. **Faculty:** The decanal team supports the program's response. Since the department plans to hold a retreat to reconsider graduate curriculum, it may be of value to map the knowledge and skills that currently exist in the program and use market reports etc. to identify training gaps and address them during the curricular revision.
Recommendation #4: PATHCORE The proposed PATHCORE (with centrally located equipment in the Department) was considered a potential strength as it will be cross utilized by both undergraduate teaching and the graduate student body. We recommend the replacement of	**Program:** We appreciate the reviewers' endorsement for PATHCORE, as we have now reached a critical mass of researchers and specialized equipment ready to be pooled and shared to maximize our departmental resources. The centralized hub will not only prevent equipment redundancy and enhance access for both undergraduate and graduate students but also serves as the necessary foundation for the recommended Lab Technician role, whose expertise will be vital for equipment maintenance and student training. Additionally, we are actively considering the fee-for-service model, which would allow personnel from outside the department to access our specialty equipment, thereby supporting sustainable cost recovery for the program.

the Lab Technician, which is needed to maintain equipment and train students. Consolidating all current equipment will prevent redundancy and enhanced access. This core could also offer a fee-for-service for personnel outside of the department to aid in cost recovery.	**Faculty:** The decanal team supports the program's response. The department can request funds to hire a Laboratory Technician during the annual budgeting process. It is important to note that funding is not guaranteed and staff hiring is within the purview of the Dean's office.
Recommendation #5: Student Committee Meeting Reports We recommend evaluating the rigor of the current student committee meeting reports such that they include clear short, medium and long-term objectives and goals for the coming 12 months ensuring student progress and timely completion of the program. We recommend that the standard requirement for a PhD student in this research-intensive program and university should be three publishable units that stand alone with the intention to be published during or after student graduates.	**Program:** We must respectfully resist mention or indication of a three publishable papers requirement to define PhD-level scholarship. We believe that doctoral excellence is best measured by the depth, originality, and significant contribution of the research to the field, rather than a fixed numerical count of units. Rigidly requiring three publishable papers sends the wrong signal and may not account for the diverse nature of research across our department, where some projects involve long-term, complex data collection, and could inadvertently prioritize quantity over the quality of the scientific inquiry. Scholarly level of a PhD is best judged by the thesis examination committee. We note that our existing advisory committee reports and evaluation forms already incorporate the majority of the reviewers' suggestions regarding performance assessment and progress monitoring. To further refine this process, we will enhance the current reporting structure to include explicitly defined short-term and long-term objectives. By requiring these specific milestones in the 12-month outlook, we can provide students with a clearer roadmap for completion. We will also implement a system for tracking students where one or more areas have been flagged as "needing improvement" to ensure that the existing remediation guidelines are being followed. **Faculty:** The decanal team agrees with the program's response. Publication requirements (if any) are set by the department/graduate program and the supervisory committees.

Recommendation #6: Clarity and Communication of Resources Available to Students. It is recommended that a clear understanding of the steps needed regarding support for health and well-being as well as dealing with student-supervisor conflict be provided to all incoming students. Equally, clear steps that the graduate program staff can provide students with when necessary. Students should also be made aware of resources available including library resources and use of AI software as appropriate.	**Program:** To address this gap in support and guidance, the university is presently drafting a new policy on academic consideration for graduate students. While this institutional framework matures, we continue to prioritize immediate clarity through our mandatory orientation for all incoming students. During these sessions, we provide a comprehensive suite of resources, including a strategic flowchart of immediate contacts for support, such as the Graduate Chair and the Office of the Ombudsperson, alongside presentations from our departmental Wellness Ambassador and various student associations. Furthermore, we recognize the rapidly evolving ethical and pedagogical landscape regarding the use of Generative AI in research and education. To provide the clear steps and appropriate use guidelines requested by the reviewers, the Graduate Education Committee is tasked with drafting a set of departmental guidelines. **Faculty:** The decanal team agrees with the program's response. The decanal team also recognizes that students now communicate differently and traditional methods such as orientation sessions may not be the best way to reach them. To address this issue, we will produce a short video to introduce students to wellness, financial, and conflict resolution resources and pathways available to them. We will include viewing of this video as a requirement within the existing "Introduction to Biomedical Research" milestone which all students in Schulich research thesis-based programs must complete within the first term of their program.
Recommendation #7: Professional Development It is recommended that further efforts be made to support students' interest in future career paths upon graduation. In addition, program-led career exploration events, either run by the student association group or faculty would provide students with an understanding of current industry/pharma or government career opportunities.	**Program:** To facilitate this, the Graduate Education Committee will work closely with the Western Pathology Association (WPA) and our faculty to host dedicated career exploration sessions that focus on industry, pharmaceuticals, and government sectors. In the past year, two such events were organized in partnership with the WPA, and we will continue to offer these opportunities. We also recognize that internships, are an excellent vehicle for this growth. In support of such endeavors, we intend to promote the 'flex term' recently introduced by the SGPS. This administrative option provides the necessary structural flexibility for students to engage in professional experiences or internships with the oversight of their advisory committee. **Faculty:** The decanal team agrees with the program's response.

Recommendation #8: Gender Imbalance Among Faculty Complement and Students It was noted that overall, there is an overrepresentation of male faculty at the full professor level; a similar disparity was noted in the proportion of male/female PhD students. A proactive approach to address these is recommended.	**Program:** It is important to clarify the distinct structures that oversee faculty career progression, as the Graduate Program possesses no authority over faculty recruitment or advancement. While the Graduate Program focuses on the student experience and curriculum, faculty hiring is managed by the Appointments Committee, and career advancement is strictly governed by the Promotion and Tenure (PT) Committee. All probationary faculty members at the rank of Assistant Professor are required to have a Mentorship Committee. We believe the most effective vehicle for encouraging the formalization of such committees is through existing institutional mechanisms, specifically the cyclical performance evaluation process and the Departmental Promotion and Tenure Committee, which are best positioned to identify and support faculty ready for the transition to Full Professor. **Faculty:** The decanal team agrees with the program's response. Schulich has made meaningful efforts to diversify faculty members in terms of gender and racial background. Schulich also intentionally aims to fill leadership positions with greater diversity

Implementation Plan

The Implementation Plan provides a summary of the recommendations that require action and/or follow-up. In each case, the Graduate Program Chair, in consultation with the SGPS and the Dean of the Faculty are responsible for enacting and monitoring the actions noted in Implementation Plan.

Recommendation	Proposed Action and Follow-up	Responsibility	Timeline
Recommendation #1: One Health Stream and Possible Medical Bioinformatics Stream	• Circulate a proposal for Medical Bioinformatics (MBI) to be introduced as an additional Research Field in the PaLM graduate program. • Revisit the current research streams within the graduate program at the mid-cycle point to make any necessary changes. • Initiate conversations with the relevant programs' leadership to determine an optimal model for One Health.	Graduate Chair Decanal Office	By September 2027
Recommendation #2: Clarity Regarding Student Funding	• Enhance the funding information provided in the September Orientation and launch it as a standalone financial literacy workshop. • Revisit the departmental graduate funding model with a specific focus on introducing a 'top-up' for students receiving external scholarships of $40,000 or more, ensuring that high-achieving students are appropriately rewarded for securing national-level funding. • Work with the Western Pathology Association to organize a formal workshop for the internal peer review of scholarship applications to refine their grant writing skills. Workshops to be expanded to include information on alternative funding sources such as Mitacs.	Department Chair; Graduate Chair; Decanal Office; PaLM Research-Based Graduate Education Committee	By September 2027

Recommendation #3: Curriculum Revisions	• Harmonize elements that naturally complement one another, such as pairing the SCCT milestone with PATHOL 9687A: *Effective Proposal Writing*. • Consider a 'Modification to an Existing Graduate Program' to implement the merger of SCCT and PATHOL 9687A and redefining the foundational course requirement for 2027 academic year. • Revamp the SCCT milestone, clearly defining attendance requirements and participation expectations.	Graduate Chair	By January 2027
Recommendation #4: PATHCORE	• Explore the possibility of hiring a Laboratory Technician • Actively consider a fee-for-service model, which would allow personnel from outside the department to access specialty equipment.	Department Chair; Graduate Chair	By January 2027
Recommendation #5: Student Committee Meeting Reports	• Enhance the current reporting structure to include defined short-term and long-term objectives. • Implement a tracking system that will flag areas labeled as "needing improvement".	Graduate Chair	By September 2027
Recommendation #6: Clarity and Communication of Resources Available to Students.	• Continue to prioritize clarity through the mandatory orientation for all incoming students. • Draft a set of departmental guidelines with regards to the use of GenAI. • Produce a short video to introduce students to wellness, financial, and conflict resolution resources and pathways available.	Graduate Chair; Graduate Education Committee Decanal Office	By September 2027
Recommendation #7: Professional Development	• Work with the Western Pathology Association and Faculty members to host dedicated career exploration sessions that focus on industry, pharmaceuticals, and government sectors.	Graduate Chair; Graduate Education Committee	By September 2027

Recommendation #8: Gender Imbalance Among Faculty Compliment and Students	• Continue supporting the work of the Appointments Committee, Performance Evaluation Committee and the Promotion and Tenure Committee to recruit and mentor faculty members with the aim of diversifying the faculty complement.	Decanal Office	Follow up as part of the progress report in 2029