



Department of Laboratory Medicine & Pathology

**PATHOLOGISTS' ASSISTANT  
GRADUATE PROGRAM HANDBOOK**

The Department of Laboratory Medicine & Pathology (LMP) Graduate Studies program is proud to offer a course and practicum-based Pathologists' Assistant program designed so that graduates will be eligible to write both the Canadian and American certification exams.

I hope the Handbook will serve as a valuable resource for you in the planning and management of graduate training in the program, but please do not hesitate to contact the LMP Graduate Studies office directly at any time should you have concerns or questions.

Sincerely,

Jelena Holovati, PhD  
Associate Professor | Director, Graduate Studies

# Table of Contents

<b>1</b>	<b>GRADUATE STUDIES - PATHOLOGISTS' ASSISTANT PROGRAM (MSC)</b>	<b>4</b>
1.1	Vision, Mission, and Values	4
1.2	Overview	4
1.3	Program Learning Objectives	5
<b>2</b>	<b>APPLICATION AND ADMISSION</b>	<b>4</b>
2.1	Requirements	4
2.1.1	<i>Academic Requirements</i>	4
2.1.2	<i>Language Requirement</i>	4
2.2	Application and Supporting Documents	4
2.2.1	<i>Application and Documents Deadline</i>	4
2.2.2	<i>Required documents:</i>	4
2.3	Admission Decision	5
2.3.1	<i>Evaluation of Applications</i>	5
2.3.2	<i>Offers of Admission</i>	5
2.4	Additional Requirements	6
<b>3</b>	<b>GUIDELINES AND RESPONSIBILITIES</b>	<b>7</b>
3.1	Graduate Students - Guidelines and Responsibilities	7
3.1.1	<i>Good Standing Policy</i>	7
3.2	Program Director/Academic Advisor – Guidelines and Responsibilities	7
3.2.1	<i>Academic Advisor Responsibilities</i>	7
3.2.2	<i>Program Director Responsibilities</i>	7
3.3	Education Coordinator – Roles and Responsibilities	8
3.4	Medical Director – Roles and Responsibilities	8
3.5	Department – Guidelines and Responsibilities	8
3.6	Graduate Studies Director	8
3.7	Graduate Studies Committee - Roles and Responsibilities	9
3.8	Graduate Student Financial Assistance/Awards	10
3.9	Student Concerns	10
3.9.1	<i>Coursework Complaints</i>	10
3.9.2	<i>Practicum Intervention Policy</i>	10
3.9.3	<i>Appeals and Grievances</i>	10
3.9.4	<i>Student/Advisor Conflicts</i>	10
<b>4</b>	<b>MASTER'S PROGRAM – PATHOLOGISTS' ASSISTANT</b>	<b>12</b>

<b>4.1</b>	<b>Time Limits for Program Completion (MSc)</b>	<b>12</b>
<b>4.2</b>	<b>Registration Requirement</b>	<b>12</b>
<b>4.3</b>	<b>Academic Standing and Grades</b>	<b>12</b>
<b>4.4</b>	<b>Professional standards</b>	<b>12</b>
<b>4.5</b>	<b>Program requirements</b>	<b>12</b>
4.5.1	<i>Required coursework</i>	12
4.5.2	<i>Research Project</i>	13
4.5.3	<i>Practicum</i>	13
4.5.3.1	Essential Functions	13
4.5.3.2	Clinical Sites	15
4.5.3.3	Clinical Assignment	15
4.5.3.4	Service Work	15
4.5.4	<i>Ethics requirement</i>	16
4.5.5	<i>Professional Development Requirement</i>	16
4.5.6	<i>Presentation/Seminar Attendance Requirement</i>	17
4.5.7	<i>Instructional Methods Course</i>	17
<b>5</b>	<b>MEETINGS WITH ACADEMIC ADVISOR</b>	<b>18</b>
<b>6</b>	<b>PROGRAM COMPLETION</b>	<b>19</b>
<b>6.1</b>	<b>Program Completion Procedures</b>	<b>19</b>

### Abbreviations

CV	Curriculum vitae
ELP	English Language Proficiency
GPS	Faculty of Graduate and Postdoctoral Studies
FoMD	Faculty of Medicine and Dentistry
GPA	Grade Point Average
IDP	Individual Development Plan
LMP	Laboratory Medicine and Pathology
PD	Professional Development

# 1 GRADUATE STUDIES - PATHOLOGISTS' ASSISTANT PROGRAM (MSc)

## 1.1 Vision, Mission, and Values

### Vision

To be a leader in the development of exceptional researchers and clinical scientists for meeting the health challenges of tomorrow

### Mission

To deliver outstanding graduate education experiences and professional training

### Values

**Academic excellence:** developing intellectual capacities for scholarly achievement

**Research excellence:** instilling independence, creativity and passion for discovery

**Student-centered culture:** delivering innovative education that engages active student learning, as well as offering supportive strategies to manage program requirements

**Training environment:** offering a stimulating multidisciplinary environment guided by dedicated faculty and staff in state-of-the-art facilities with leading-edge technologies

**Communication excellence:** encouraging effective dissemination of knowledge through teaching, scientific presentations and publications

**Collaboration:** promoting a cohesive and interactive multidisciplinary environment

**Professional development:** fostering networking opportunities, career development, citizenship, community service and mentoring

## 1.2 Overview

Pathologists' Assistants work in an environment which necessitates:

- fine motor skills
- visual acuity
- long periods of standing
- working under high pressure
- exposure to chemicals
- infectious disease risks
- strong communication skills
- computer work
- confidentiality.

The course- and practicum-based program leads to a Master of Science with the specialization Pathologists' Assistant (PA) in the Department of Laboratory Medicine and Pathology. The program has been designed so that graduates will be eligible to write the [Canadian Certification Council of Pathologists' Assistants \(CCCPA-CCCAP\)](#) certification exam for Pathologists' Assistant. Graduates will also be eligible to write the [American Society for Clinical Pathology \(ASCP\)](#) certification exam.

This program is a continuous 24-months, consisting of two terms (8 months) of didactic courses, followed immediately by a clinical practicum (16 months) and a scholarly research component in either basic or clinical research.

The clinical practicum component of the program will be competency-based with students expected to successfully complete all essential competencies in the grossing and autopsy rotations, including

safety, professionalism, ethics, laboratory management, quality assurance, pre-gross description, dissection and documentation, and the preparation and examination of the human body.

### **1.3 Program Learning Objectives**

The student will:

1. become competent grossing a variety of surgical specimens as outlined on the practicum rotation schedule and keep a record of cases.
2. become competent in the conduct of hospital adult/pediatric autopsies – including perinatal autopsies as outlined on the practicum rotation schedule and keep a record of cases.
3. obtain experience in forensic autopsy as outlined on the practicum rotation schedule and keep a record of cases.
4. become familiar with histology procedures and become competent in cryotomy and the differentiation of normal tissue microanatomy.
5. demonstrate knowledge of workplace policies and procedures (including safety) through completion of assigned modules and examinations.
6. obtain exposure to the funeral industry, in order to appreciate the impact of autopsies on funeral preparations.
7. demonstrate the ability to apply the principles of laboratory management when presented with situations in examinations.
8. demonstrate an understanding of professionalism and professional behaviour to meet the professionalism competency.

## 2 APPLICATION AND ADMISSION

A maximum of 3 students will be accepted into the program each year.

### 2.1 Requirements

#### 2.1.1 Academic Requirements

Applicants require:

1. at least a baccalaureate degree or its academic equivalent.
2. the following prerequisites: Biology (6 UCW), Physiology (3 UCW), Chemistry or Biochemistry (3 UCW), Human Anatomy (3 UCW), Mathematics (3 UCW). It is to the applicant's advantage to have completed all prerequisite courses within the last 10 years.
3. successful completion of a Medical Terminology course. This course can be in any format (online, in person, correspondence) and taken from any institution.
4. Proof of successful completion of a course focused on the histories, experiences, and/or perspectives of Indigenous peoples in Canada, or course plan to complete course by the beginning of the second year of study.
5. an admission grade point average (GPA) of at least 3.0 on the University of Alberta 4-point scale, or the equivalent qualification from another institution - this is calculated on the most recent course work (equivalent to 60 units of course weight (UCW) or the last two years of full-time study).

#### 2.1.2 Language Requirement

LMP requires proficiency in English prior to acceptance in the program. These requirements exceed those of the GPS.

- Applicants must submit proof of English language proficiency (ELP) if they do not hold a degree from countries or international universities listed on the Faculty of Graduate Studies and Research page of [Recognized English Language Countries and Institutions](#). Three ELP examinations are recognized and minimum scores are listed below:
  - TOEFL (internet-based): A minimum overall score of 95 with a minimum of 21 on each individual skill area.
  - Academic IELTS: A minimum overall band score of 7.0 with a minimum of 6.5 in each band.
  - EAP 550 (EXELP 7550): Successful completion of the EAP 550 course

### 2.2 Application and Supporting Documents

Applications are submitted online via the University of Alberta's Graduate Studies Management Solution (GSMS), accessible at GPS' [Apply for Admission](#) web page.

#### 2.2.1 Application and Documents Deadline

The admit term for the Pathologists' Assistant program is Fall (September). Applications and all supporting documentation must be received by **April 1**.

#### 2.2.2 Required documents:

Except for reference letters, all supporting documents are uploaded directly in pdf format only as part of the online application process.

1. Official transcripts or mark sheets and degree certificates from all university or post-secondary institutions previously attended whether or not they are perceived as relevant to the Pathologists' Assistant program. Refer to [Application Requirements for Academic Documents](#) for detailed information. Failure to list and provide complete transcripts from all institutions attended on the application may be considered an intentional omission and will lead to the cancellation of an application for admission or withdrawal of an offer of admission.
2. Proof of English language proficiency (if necessary).
3. Proof of successful completion of a Medical Terminology course, or course plan to complete acceptable course by beginning of first term of study.
4. Proof of successful completion of a course focused on the histories, experiences, and/or perspectives of Indigenous peoples in Canada, or course plan to complete course by the beginning of the second year of study.
5. Curriculum vitae or résumé (do not use the University of Alberta's CV Form)
6. Letter of intent. This letter should address the following:
  - Why have you chosen this profession?
  - Why are you a good fit for this profession?
  - What are your professional goals and ambitions?
  - Demonstrate/reflect on your attention to detail, fine motor skills, ability to multitask and manage competing priorities, computer skills.
7. Two letters of recommendation; these must be received by the application deadline.
  - A. References may be academic or work. The online application system requests 1 work references and 1 academic reference. This is a guideline only; we will accept any combination of work and academic references.
  - B. Applicants are to ask their referees to address the following in the General Appraisal section of the referee form or as a separate document:
    1. Provide an appraisal of the following specific qualities of the applicant:
      - a. Critical thinking/problem solving
      - b. Work ethic/industriousness
      - c. Multitasking/managing competing priorities
      - d. Judgment
      - e. Attention to detail
      - f. Fine motor skills
      - g. Communication skills
    2. Address the applicant's ability to carry on advanced study and research, teaching ability, potential for successful study in the applicant's field, and weaknesses, if any. Please provide specific examples to support your comments.

## **2.3 Admission Decision**

### **2.3.1 Evaluation of Applications**

Only complete application packages received by the deadline will be considered. Applications will be reviewed to ensure the applicant has the necessary prerequisite courses, meets the minimum academic requirement and the English language requirement. All eligible applications will be assessed by the program's admissions committee. Candidates who are shortlisted will be invited to an interview (in person or via videoconference).



### **2.3.2 Offers of Admission**

Laboratory Medicine and Pathology will make recommendations for admission for successful applicants to the Faculty of Graduate and Postdoctoral Studies (GPS). GPS makes a final review of the application, and *only the GPS may extend the official offer of admission*.

Unsuccessful applicants will be notified via the application system or by the LMP Graduate Program office directly.

### **2.4 Additional Requirements**

Admitted students are responsible for these additional requirements and any fees associated with them.

**Police Information Checks:** Applicants should be aware that a clear Police Information Check, which must include a Vulnerable Sector Check, is required at the time of admission. Students who fail to provide a clear Police Information Check may be required to withdraw from their program. See the [University of Alberta Calendar](#) for more information on the general requirements concerning Police Information Checks and the fees associated with them.

**Immunizations:** Students are required to obtain specified immunizations. Details will be provided on admission to the program.

## 3 GUIDELINES AND RESPONSIBILITIES

### 3.1 Graduate Students - Guidelines and Responsibilities

Graduate students are ultimately responsible for their own programs and expected to become familiar with all regulations and deadlines relating to their program. GPS' [Graduate Program Manual 1.1](#) outlines graduate student responsibilities.

Students must be familiar with, and adhere to, the terms of the University of Alberta's [Code of Student Behaviour](#).

The student is responsible for successfully completing all course work and the capping exercise. Where the capping exercise involves a project, the student is responsible for producing a typed report of the project or some other finished product to be retained by the department ([U of A Calendar](#)).

#### 3.1.1 Good Standing Policy

Students must be in "good standing" (see the [Good Standing Policy](#)) in order to receive certain Laboratory Medicine and Pathology graduate program benefits.

### 3.2 Program Director/Academic Advisor – Guidelines and Responsibilities

The Program Director serves as the Academic Advisor for graduate students in this program.

#### 3.2.1 Academic Advisor Responsibilities

The academic advisor is essential to the successful pursuit by the student of the course-based Master's degree ([GPS Grad Program Manual Section 1.3](#)). The academic advisor will:

- provide appropriate guidance to the student in course selection, course changes, and progress within the program;
- meet with a full-time student no less than two times in an academic year;
- explain the rationale and review with the student any administrative and/or curricular changes that have occurred since their last scheduled meeting and any impact that such changes will have (or potentially might have) on the student's progress;
- where appropriate, consider a graduate student a junior colleague;
- maintain open communication with the student concerning any problem and, in the event of a conflict in the advisor-student relationship, discuss the issues with the student and the LMP Graduate Studies Director in a timely fashion.

#### 3.2.2 Program Director Responsibilities

Among other responsibilities, the program director must:

- be responsible for the organization, administration, instruction, evaluation, continuous quality improvement, curriculum planning and development, directing other program faculty/staff, and general effectiveness of the program;
- have regular and consistent contact with students, faculty, and program personnel

[\(NAACLS Standards for Accredited and Approved Programs\)](#)

### 3.3 Education Coordinator – Roles and Responsibilities

“The education coordinator/clinical coordinator ... must provide supervision and coordination of the instructional faculty in the academic and clinical phases of the education program.”

[\(NAACLS Standards for Accredited and Approved Programs\)](#)

### 3.4 Medical Director – Roles and Responsibilities

“The medical director must provide continuous medical direction for clinical instruction. The medical director must actively elicit the understanding and support of practicing physicians, and must participate in the clinical instruction of pathology within the program.”

[\(NAACLS Standards for Accredited and Approved Programs\)](#)

### 3.5 Department – Guidelines and Responsibilities

It is the responsibility of the department to:

- verify that all courses and the capping exercise have been successfully completed before recommending a student for graduation; and
- submit to the GPS a Report of Completion of Course-based Master's Degree form.

This information must be received and verified by GPS before the student's name is placed on the convocation list.

Failure to meet the deadlines in the Academic Schedule will result in a delay in awarding the degree.

[\(U of A Calendar\)](#)

### 3.6 Graduate Studies Director

The LMP Director, Graduate Studies has primary oversight over all the LMP thesis-based Master's and PhD programs and course-based MSc programs, fostering a learning environment that promotes delivery of outstanding graduate education experiences and professional training. Key qualifications include a PhD (tenured or a tenure-track faculty) with a strong understanding of LMP, FoMD and Faculty of Graduate and Postdoctoral Studies (GPS) Program policies and procedures; experience in MSc and PhD student supervision, academic administration, strategic and curriculum planning; ability to work collaboratively and build partnerships within a larger and complex organization.

The Associate Director consults with the Director on program matters and acts as the graduate coordinator when the Director cannot.

#### Graduate Studies Director Responsibilities:

- Responsible for the administration, organization, evaluation, continuous quality improvement, curriculum planning, and general effectiveness of the LMP graduate program
- Acts as the official graduate program representative of the Department to GPS and FoMD, ensuring that the regulations and requirements of the University are administered and met in a fair and equitable manner
- Maintains effective relationships and work collaboratively with other university departments, research institutes, centres, faculties, colleges, and stakeholders to support graduate research and training development

- Communicates relevant information from GPS and FoMD to graduate students and faculty members in the Department
- Communicates relevant information to GPS and FoMD regarding graduate students in the Department
- Monitors student supervision and ensures that the supervisors meet regulations and requirements of GPS, FoMD, and the LMP department
- Responsible for admission of students to the department. Confirms the applicants meet the admission criteria before recommendations for admission are forwarded to GPS
- Ensures that a graduate student supervisor and a supervisory committee are set up within one year of the student starting the graduate program
- Recommends graduate student supervisors to FoMD for appointment in accordance with LMP, FoMD, and GPS policy
- Recommends members of the doctoral supervisory committee appointment to GPS in accordance with LMP, FoMD, and GPS policy
- Approves members of the master's supervisory committee appointment
- Acting as an advisor concerning the appointment external examiners
- Oversees submission and distribution of the PhD Proposal package, reviewers' comments, and student responses to the LMP Graduate Studies Committee (GSC) for approval
- Assists supervisors in addressing concerns regarding graduate student progress
- Monitors the progress of all graduate students in the Department
- Acting as an advisor concerning any changes to a graduate student's status or a program
- Chairs the graduate student candidacy and final oral examinations or appropriately delegates this responsibility
- Initiates and coordinates LMP graduate student orientations activities
- Acts as the course coordinator for LABMP 540 and LABMP 620/621 or appropriately delegates this responsibility
- Approves grades for graduate level LABMP courses or appropriately delegates this responsibility
- Chairs meetings of the LMP GSC Committee, acts as a member/representative of the LMP graduate program at the LMP Awards and Education Committees and other LMP, FoMD, and GPS committees and working groups, as requested

Conflict of interest guidelines are outlined in the [University of Alberta Calendar](#).

### **3.7 Graduate Studies Committee - Roles and Responsibilities**

The role of the Graduate Studies Committee is to:

- promote and enhance graduate studies;
- set policy as defined in the LMP *graduate program handbooks*;
- review and make decisions as necessary regarding admissions and student awards;
- assist in monitoring graduate student progress;
- review PhD proposal packages (proposal, student progress, research environment, and committee expertise) and makes recommendations regarding a student's general readiness to proceed to the candidacy examination; and
- disseminate key information to students and supervisors.

The graduate program in Laboratory Medicine and Pathology is administered by the Graduate Studies Committee which normally consists of the Department Chair, the Director of Graduate Studies; the Associate Director of Graduate Studies, the Director of the Pathologists' Assistant program, at least 4 additional faculty members (where at least 50% must be actively supervising graduate students), 1-2 graduate student representatives, and the Graduate Program Advisor who is a non-voting member. All faculty members of the Graduate Studies Committee are appointed by the Department Chair for a defined term of service.

At least 3 faculty members plus the Graduate Studies Coordinator are required for quorum.

### **3.8 Graduate Student Financial Assistance/Awards**

Students are fully responsible for paying all required tuition and fees by the deadline dates set out in the Calendar.

Financial assistance in the form of scholarships or awards may be available to qualified students. See [LMP Awards and Funding](#) and GPS [Awards and Funding](#) for awards information pertinent to LMP students.

Students who are not in good standing may not be eligible for these benefits (see the LMP [Good Standing Policy](#)).

### **3.9 Student Concerns**

#### **3.9.1 Coursework Complaints**

Concerns regarding coursework or grades should be addressed first with the course instructor and, if that proves unsatisfactory, then with the chair of the department where the course is taught, and finally with the dean of the faculty in which the course is taught or that dean's designate (usually the associate dean).

For detailed guidelines of the informal and formal grade appeals process see the Faculty of Medicine and Dentistry's Policy and Procedure on [Academic Appeals](#). Specific timelines apply.

Grades cannot be appealed beyond the Faculty level.

The [Office of the Student Ombuds](#) may be consulted for advice at any time.

#### **3.9.2 Practicum Intervention Policy**

The [Calendar](#) states that "the University has an obligation to protect the public interest, public safety, and public health by ensuring that students in practicums conform to accepted standards of professional, competent and safe practice in their work with patients, clients, and co-workers." Accordingly students in the Pathologists' Assistant program are governed by the University of Alberta's [Practicum Intervention Policy](#) under which a Dean may intervene in the practicum of a student. Students have the right of appeal.

#### **3.9.3 Appeals and Grievances**

Students should consult the [University of Alberta Calendar](#) and the University's [Academic Appeals Policy](#) for details on appeals and grievances.

#### **3.9.4 Student/Advisor Conflicts**

At times, conflicts may arise between the student and advisor or course instructor/coordinator.

- The first step is to try to resolve the conflict or misunderstanding informally. The advisor (or course instructor/coordinator) and student should discuss the problem together.

- If resolution is unsuccessful, the Graduate Studies Director should be notified as early as possible. It is the responsibility of the Graduate Studies Director to arrange for consultation and mediation.
- Assistance/advice of the supervisory committee or other appropriate resources may be requested.
- Finally, assistance of GPS may be requested
- The [Office of the Student Ombuds](#) may be consulted for advice at any time.
- The Faculty of Medicine & Dentistry's [Office of Advocacy & Wellbeing](#) may also be contacted regarding issues pertaining to the health and well-being of learners, including graduate students and also advocates on their behalf. It is a safe and confidential place to seek out resources and support for any situation that might affect a student's ability to perform at his or her best.

## 4 MASTER’S PROGRAM – Pathologists’ Assistant

### 4.1 Time Limits for Program Completion (MSc)

The Pathologists’ Assistant program is a continuous 24-month program: 8 months of coursework, followed by a 16-month clinical practicum and project.

### 4.2 Registration Requirement

Students in this program will be registered full-time each Fall, Winter, Spring, and Summer term for two years. 51 units of course weight will be taken.

### 4.3 Academic Standing and Grades

- LMP graduate students must maintain a cumulative program GPA of 3.0
- The passing grade for graduate courses is C+ (2.3)
- If the cumulative grade point average falls between 2.3 and 3.0, termination of program or continuation in the program for a specified probationary period may be recommended.
- Notwithstanding the above, a graduate student whose academic standing falls below a grade point average of 3.0 may be required to withdraw at any time.

### 4.4 Professional standards

Pathologists’ Assistant students must adhere to the Faculty of Medicine and Dentistry’s [Professional Standards for Students](#), “a code of values, expectations and conduct [reflecting] the ideals that are integral to professionalism.”

### 4.5 Program requirements

#### 4.5.1 Required coursework

- Mandatory courses (21 units of course weight (UCW)), clinical practicum (24 UCW), and graded research project (6 UCW). Full course descriptions are in the [University of Alberta Calendar](#).

#### Year 1

Fall	ANAT 503 (6): Human Anatomy LABMP 500 (3): Introduction to Human Disease OR LABMP 540 (3): Directed Reading Course LABMP 593A (1.5): Systemic Pathology LABMP 595A (1.5): Laboratory Management
Winter	ANAT 500 (3): Human Development LABMP 593B (1.5): Systemic Pathology LABMP 594 (3): Anatomic Pathology Techniques LABMP 595B (1.5): Laboratory Management
Spring / Summer	LABMP 596 (6): Pathologists’ Assistant Clinical Practicum I

## Year 2

Fall	LABMP 597 (6): Pathologists' Assistant Clinical Practicum II LABMP 900A (3): Research Project
Winter	LABMP 598 (6) : Pathologists' Assistant Clinical Practicum III LABMP 900B (3): Research Project
Spring/Summer	LABMP 599 (6): Pathologists' Assistant Clinical Practicum IV

- If credit has already been granted in LABMP 400, ANAT 400, or ANAT 403, the student will not be permitted to take the corresponding LABMP 500, ANAT 500 or ANAT 503 and will be required to complete a directed reading course(s) LABMP 540 in a related topic or a substitute course approved by the Graduate Coordinator.

### 4.5.2 Research Project

**LABMP 900** Research Project. The course is an independent research project supervised by a pathologist, pathologist's assistant or researcher. The student will choose the advisor and research project. The advisor will provide mentorship for the project. Seminar sessions cover topics relevant to conducting independent scientific research. The student will be expected to write a research proposal, keep an accurate laboratory notebook, and conduct adequate experimental research. The project will be written as a research paper and presented at departmental rounds.

As per GPS policy, the report of the project must be retained by the department.

Students are requested to deposit their final research paper and presentation into [ERA](#), the University of Alberta's Education and Research Archive.

### 4.5.3 Practicum

The clinical practicum courses which comprise 16 months of the program are LABMP 596, LABMP 597, LABMP 598, and LABMP 599.

Specific technical objectives and competencies for the practicum are available in the course syllabi and objectives.

#### 4.5.3.1 Essential Functions

Successful completion of the MSc with specialization in Pathologists' Assistant Program at the University of Alberta requires achievement of the following core competencies during the clinical practicum courses:

##### **Observation**

A student must possess the ability to observe accurately at varying distances. A student must be able to observe demonstrations and participate in examinations, dissections, and processing of specimens. A student must be able to properly orient a specimen based on physical appearance, and accurately describe anatomic features, including the appearance of normal and abnormal tissues. The performance of such tasks requires the student to be able to accurately perceive light versus dark, and to differentiate between different colors. A student must also be able to use a variety of tools, equipment, and chemicals to perform these tasks with consistency and precision. Observation requires the functional use of the sense of vision, in addition to other sensory modalities such as smell and touch.



### ***Communication***

A student must be able to communicate effectively and in a respectful and professional manner with physicians, faculty, laboratory staff, fellow students, and other members of the healthcare team through speaking, listening, reading, and writing in English. A student must be able to recognize, interpret, and appropriately use other auditory cues, including tone of voice and volume of speech, in addition to nonverbal forms of communication, including facial expressions, body language, and hand gestures. A student must be able to interpret and implement instructions in a complete and timely manner while working alone or with others. A student must be able to make accurate and appropriate entries in medical records, documents, and reports. Effective communication further requires the integration of a number of sensory modalities, including vision, sound, touch, and smell, which the student must be able to use to accurately describe specimen characteristics (i.e. shape, color, consistency, texture), detect potential hazards in the workplace, and ultimately to ensure the safety of patients, themselves and others in the laboratory.

### ***Sensory and Motor Coordination and Function***

A student must have sufficient sensory and motor function to perform the movements required to conduct all aspects of post-mortem examinations and dissection of surgical pathology specimens. These activities may require the student to sit or stand for long periods of time; lift and carry heavy objects; perform pushing, pulling, reaching, and bending motions; and grasp and manipulate tissues, tools, and other laboratory equipment. The student must also be able to perform all laboratory protocols, work with standard laboratory materials, and properly put on and remove personal protective equipment. These actions and activities all require the coordination of muscular, skeletal, and sensory functions, including touch and vision, to produce both gross and precise hand and body movements. Additionally, the student must possess tactile precision in order to perform these activities accurately and safely.

### ***Intellectual, Conceptual, Integrative and Quantitative Abilities***

A student must possess sufficient critical thinking and problem-solving skills to perform the duties of a Pathologists' Assistant, including the ability to accurately measure, calculate, reason, analyze, integrate, learn, comprehend, and synthesize information. A student must be able to comprehend, retain, and recall large volumes of complex information, and apply this knowledge to the dissection and examination of autopsy and surgical pathology specimens. A student must be able to interpret three-dimensional and spatial relationships of anatomical structures. A student must be able to identify pertinent findings from the examination of autopsy and surgical pathology specimens, and communicate this information in an accurate, effective, and timely manner. A student must be able to rely on their intellectual abilities, knowledge and prior experience to exercise good judgment.

### ***Behavioral and Social Attributes***

A student must possess the emotional maturity and mental fitness necessary to perform the duties of a Pathologists' Assistant. The student must be aware of the often sensitive and confidential nature of these duties, while also recognizing and understanding the importance of the roles and responsibilities of a Pathologists' Assistant. A student must assume responsibility for their work. A student is expected to seek out feedback for ongoing improvement, acknowledge suggestions and criticism when provided, reflect on this feedback and integrate it into future work, and take corrective or remedial measures if necessary. A student must be able to adapt to changing environments and cope with physically and mentally taxing workloads. A student must be compassionate and respectful towards others, and act with integrity, professionalism, and dignity.

#### **4.5.3.2 Clinical Sites**

The main clinical sites for the practicum are all part of Alberta Precision Laboratories (Alberta Health Services) or have student placement/affiliation agreements with Alberta Health Services.

University Hospital/Stollery Children's Hospital  
Anatomical Pathology  
5B4.02 Walter C. MacKenzie Centre  
Phone: (780) 407-1256 | Fax: (780) 407-3009

Misericordia Community Hospital  
Laboratory Medicine & Pathology  
16940 87 Ave NW, Edmonton, AB T5R 4H5  
Phone: (780) 735-2472 | Fax: (780) 735-2870

Royal Alexandra Hospital  
Laboratory Medicine and Anatomical Pathology  
5001-1 DTC  
10240 Kingsway Avenue  
Edmonton, AB, Canada, T5H 3V9  
Phone: (780) 735-5281 | FAX: (780) 735-4715

Grey Nuns Community Hospital  
1100 Youville Drive West  
Edmonton, AB, Canada, T6L 5X8  
Phone: (780) 735-9627 | Fax: (780) 735-9688

Alberta Precision Laboratories Base Lab  
#200, 10150 - 102 Street  
Edmonton, AB T5J 5E2  
Phone: 1-877-868-6848

Office of the Chief Medical Examiner  
7007 116 Street NW  
Edmonton, Alberta T6H 5R8  
Phone: (780) 427-4987

#### **4.5.3.3 Clinical Assignment**

The clinical practicum is designed with flexibility and redundancy. There are four clinical sites and two to four students in practicum rotations at a time. To successfully complete the practicum students must finish all of their case type competencies and it is designed such that the students should be able to meet the majority of their competencies in the first 12 months of the practicum. As the practicum occurs across multiple sites where there is overlap in types of cases across the sites, when one of the clinical sites is not available there is almost always availability for training space at another site. In the event a suitable placement is not available for a student during these first 12 months the redundancy exists to complete any needed competencies in the last 4 months of the program. Finally, in the rare event a clinical placement was not available for specific needed competencies, the students are trained such that with their solid foundation of skills they can complete virtual competencies using visual aids and discussion.

#### **4.5.3.4 Service Work**

There is no service work required in the PA program. During the practicum all of the patient cases the PA student is involved with are current clinical cases. All cases are under the supervision of a

pathologist assistant who is ultimately responsible for the case and students are not essential to completing the laboratory workload and interact with these cases as learners only. Cases for students are always chosen with a mind to educational value first balanced with the operational needs of the laboratory. If the student has concerns with being asked to work with cases for the purpose of completing workload only or without appropriate supervision, they should immediately contact the onsite Alberta Public laboratories gross room manager, Program Director or Education Coordinator.

#### **4.5.4 Ethics requirement**

An ethics requirement is mandatory for all newly-admitted University of Alberta graduate students.

Effective Fall 2022, Ethics and Academic Integrity Training (currently fulfilled via the [LMP Ethics Training Policy](#)) will be replaced by the new [Ethics and Academic Citizenship Requirement](#).

For Pathologists' Assistant Master's students, the Ethics and Academic Citizenship Requirement will consist of taking one zero-credit, self-paced, online course: [INT D 710: Ethics and Academic Citizenship](#). Registration is via Bear Tracks and should be completed within the first 8 months of the program.

It is the responsibility of the graduate student to submit supporting documentation to the LMP Graduate Program office at [LMPgrad@ualberta.ca](mailto:LMPgrad@ualberta.ca).

#### **4.5.5 Professional Development Requirement**

It is mandatory for all graduate students to complete a professional development requirement, which includes the *Individual Development Plan (IDP)* and a minimum of 8 hours of professional development activities.

There is a recognized need for graduate students and their supervisors/advisors to be more aware of professional development, and the diversity of skills to be developed during graduate programs that go far beyond the ability to complete academic and research requirements. During completion of the IDP, students are expected to identify 3 possible career paths, and map appropriate professional development activities to support development of skills to enhance employment opportunities after graduation. In addition to career paths in business, industry, government, nonprofit sectors, and academia, etc., the "3 possible career paths" for PA students could reflect PA careers but in different streams/settings: e.g., academic hospital PA, community hospital PA, forensic autopsy PA, hospital autopsy PA, PA in hospital admin role, PA in university academic teaching role, PA in quality assurance role, etc. Accordingly, students are expected to:

1. Begin developing the IDP by the start of the second term of the first year. GPS' [Professional Development Requirement](#) website provides guidance.
2. Identify a career mentor before the end of the second term of the first year.

The career mentor does not have to be the academic advisor, but must have an official academic position. *Plan to meet with the career advisor periodically – at least annually* – to discuss the IDP and appropriate professional development activities.

3. Submit LMP's [Professional Development Requirement \(template\)](#), which includes the IDP and a plan for a minimum of 8 hours of professional development activities to the LMP Graduate Program office within 12 months of program commencement.

See GPS' [Eight Hours of Professional Development Activities](#) for guidance.

4. Provide evidence of completion of the professional development requirement to the LMP Graduate Program office by the end of year 2.

The student must meet with the career mentor to review the evidence of completion of the professional development requirement. If met, the career mentor will sign the [Individual Development Plan & Professional Development Completion](#) form. The student will then submit this documentation to the Graduate Studies Director for review and signature. The form is then retained in the student's file as evidence for the *Completion of Thesis & Program Requirements* form.

#### **4.5.6 Presentation/Seminar Attendance Requirement**

1. Master's students are required to make one oral presentation to the department at LMP Rounds. Student LMP Rounds presentations are scheduled for half an hour, generally a 20-minute presentation followed by a short question period. Students in the Pathologists' Assistant program will present their research project.
2. In order to obtain a broad perspective on a wide range of topics in their field, students in the Pathologists' Assistant program are expected to attend the seminars recommended to them.
  - a. Attendance for a minimum of 10 hours in Year 1 (first 12 months) of the program.
  - b. Attendance for a minimum of 10 hours in Year 2 (last 12 months) of the program.

Proof of attendance is required. Students will track their attendance using the [Course Based MSc \(LMP\) Seminar Record of Attendance](#) form and submit the signed form to the LMP Grad Program office at the end of each academic term (Fall, Winter and Spring/Summer). Failure to submit the form will not be accepted as a reason for failing to meet the attendance requirement of the program.

#### **4.5.7 Instructional Methods Course**

Completion of a non-credit instructional methods course is required. This requirement can be met by any instructional methods / teaching program including, but not limited to:

1. completion of Level One of the University of Alberta's [Graduate Teaching and Learning program](#).
2. [Instructional Methods in Health Professions Education](#) (University of Michigan) offered via Coursera.

Courses not listed here may be acceptable but must be approved by the Program Director and Graduate Studies Director.

## 5 Meetings with Academic Advisor

It is the responsibility of the academic advisor to meet with a full-time student no less than two times in an academic year. ([FGRS Graduate Program Manual 1.3](#))

The graduate student should be made aware at each meeting whether they are making satisfactory or unsatisfactory progress.

The advisor must explain the rationale and review with the student any administrative and/or curricular changes that have occurred since their last scheduled meeting and any impact that such changes will have (or potentially might have) on the student's progress.

An email record of the meeting, summarizing the discussion, will be sent from the advisor to the student and copied to the graduate program advisor for inclusion in the student file.

## 6 PROGRAM COMPLETION

### 6.1 Program Completion Procedures

[Convocation information and deadlines](#) are posted on the GPS website.

The following are to be completed **before** the graduate student convocation deadlines:

- The LMP Graduate Program verifies successful completion of all program requirements and submits the Report of Completion of Course-based Master's Degree to GPS.
- The student must apply to graduate in [Bear Tracks](#).

All applications for graduation are subject to review and approval by the Faculty of Graduate Studies and Research. Applying to graduate on Bear Tracks **does not** guarantee convocation

- The student must pay all outstanding fees. Parchments and other official documentation will not be released to students with outstanding accounts.

Students will be invited to participate in an exit survey. Their input and feedback will help to improve the overall learning experience of future students in the LMP graduate program.

Students are encouraged to attend the [Convocation ceremony](#) held in their honour. The student's degree is conferred at this ceremony. The parchment (the official documentation of the student's academic credential containing the student's name, degree/specialization and academic honors if applicable) is given at this time. Students unable to attend Convocation may pick up their parchment in person during specified dates following the ceremony; if it is not picked up, it will be mailed to the current address on the student record.