

# MALAYSIAN MEDICAL COUNCIL SPECIALTY-SPECIFIC REQUIREMENTS (SSR) (ANATOMICAL PATHOLOGY) 1<sup>ST</sup> REVISION

# Prepared By:

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Malaysian Medical Council

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# **Preface**

- The Specialty-Specific Requirements (SSR) pertain to requirements within each specialty and specify the minimum requirements pertaining to the training curriculum, trainers, educational resources and head of programme.
- 2. The Specialty-Specific Requirements (SSR) are intricately linked to the MMC Malaysian Standards for Medical Specialist Training 2019, and the Standards and SSR must be read and applied together.
- 3. These Specialty-Specific Requirements (SSR) are an update from the first edition, incorporating improvements in structure of training, specialty competencies, which are compiled as the First Revision.

# Specialty-Specific Minimum Requirements for Training Curriculum (Based on Area 1.2.4 of Malaysian Standards for Medical Specialist Training) Anatomical Pathology

Specialty-Specific Requirements (Reference Standard)	Crit	eria
1) Minimum entry requirements for postgraduate training	Fully registered with the Maccurrent annual practicing cert     Successful entry evaluation in	
(Standard 3.1.)		
2) Minimum duration of training programme	Completion of a minimum of 48 the specialty programme.	months of specialised training in
(Standard 1.2.4 - Table 2)		
3) Structure of training (rotation/modules)		a clear pathway encompassing include the basic and advanced blogy.
Training overview	Areas	Minimum Duration (months)
Training rotation/modul es and case mix	Core areas of diagnostic histopathology (surgical pathology), and diagnostic	36

(Standard 1.2.4 - Table 3 & Table 4)	cytopathology and autopsy pathology)	
	Relevant training in areas which may enhance anatomical pathology practice, such as, but not limited to haematology, medical microbiology, chemical pathology, autopsy pathology, molecular pathology, digital pathology, laboratory techniques, laboratory management and research.  *Effective learning period per year	12 ar or 12 months is 48 weeks
4) Assessments	Assessments should	
(Standard 2.2.1)	<ul> <li>i. Employ appropriate methods and levels that are well-aligned with learning outcomes. These include a variety of methods and tools such as written assessments, clinical assessments, supervisor's report, logbook, attendance, training attended, practice diary, research report, communication skills including methods appropriate to assess ethics and professionalism.</li> <li>ii. Include formative and summative assessments throughout each rotation, semester, or year of study.</li> <li>iii. Include clear criteria for progression to next year of study.</li> <li>iv. Include an exit evaluation/assessment.</li> </ul>	
5) Additional requirements for completion of training	i. Completion of graduate-level re	esearch or clinical audit project.
(Standard 1.2.4)		

6) List of
competencies
to be acquired
upon
completion of
training

# **Generic competencies**

#### Able to:

- i. Diagnose, investigate and manage common anatomical pathology cases whilst considering social, health economics and preventive aspects
- ii. Anticipate and manage complications in the laboratory diagnostic services
- iii. Work independently and in teams competently and professionally
- iv. Practice good ethical conduct
- v. Practice good and effective communication skills
- vi. Perform critical review, plan and conduct scientific research
- vii. Exemplify self-advancement through continuous academic and/or professional development including digital health
- viii. Apply evidence-based medicine in the field of anatomical pathology
- ix. Demonstrate exemplary leadership qualities in the multidisciplinary team management of anatomical pathology cases
- x. Demonstrate an entrepreneurial mindset, creative problemsolving and resilience

#### **Specific specialty competencies**

- Manage tissue specimens for histopathology, including grossing, microscopy and the appropriate use of ancillary tests (e.g. histochemistry, immunohistochemistry, in-situ hybridization, molecular tests)
- ii. Report histopathology findings
- iii. Manage and report frozen section findings
- iv. Report cytopathology findings
- v. Perform fine needle aspiration
- vi. Report basic autopsy findings
- vii. Critically evaluate and discuss diagnostic anatomic pathology and autopsy findings with healthcare providers involved in patient care.
- viii. Conduct clinical audit and quality assurance activities to

# (Standard 1.1.4)

- improve anatomical pathology laboratory services.
- ix. Identify occupational health hazards and safety requirements for the safe provision of anatomical pathology laboratory services.
- x. Critically evaluate research findings and to contribute towards medical research, education and training in anatomical pathology.

Note: These criteria represent the minimum standards. Each educational programme provider may exercise their autonomy to state criteria above and beyond these minimum standards.

# Specialty-Specific Minimum Requirements for Training Centres and Head of Programme (Based on Areas 3-6 of Malaysian Standards for Medical Specialist Training) -Anatomical Pathology

Item	Specialty-Specific	Criteria	
No	Requirements		
	(Reference Standard)		
4	Trainer-to-trainee ratio	1:4	
	(Standard 3.1.3)		
5	Minimum qualifications	i. Registered with National Specialist Register.	
	and experience of trainers		
		ii. Completed training-of-trainer course/equivalent	
	(Standard 4.1.2)		
6	Minimum requirements	The diagnostic facilities and equipment requirement of	
	for educational resource	the programme training centres must collectively be	
		able to accommodate the following minimum	
	(Standard 5.1.1)	requirement:	
		i. Physical facilities:	
		Dhysical facilities	
		Physical facilities	
		Seminar/ tutorial rooms	
		Trainee workspace	
		Computers and internet	
		facilities	
		Library of reference books or	
		journals (physical and/or virtual)	
		ii Camilaa ayaaa	
		ii. Service areas:	
		The laboratory/ice) must be accepted or approved by	
		The laboratory(ies) must be accepted or approved by	
		relevant body(ies)* for diagnostic anatomical pathology laboratory or equivalent services.	
		iaboratory or equivalent services.	

#### **Services**

Laboratory information system and a case-indexing system (eg. SNOMED or ICD-10.)

Use of histochemical, immunohistochemical and immunofluorescence stains.

Ancillary techniques such as in-situ hybridization, and molecular testing

# iii. Equipment:

## **Equipment**

# Teaching facilities:

- i. Dual-viewing or multi-headed microscopes
- ii. Computer with internet facility
- iii. Microscope-linked or digital image projection for multidisciplinary team discussions

# Diagnostic laboratories:

- i. Cut-up stations
- ii. Biosafety cabinets (at least BSC-2)
- iii. Tissue processor
- iv. Microtomes
- v. Cryostat microtome
- vi. Centrifuges and cytocentrifuges
- vii. Automated or manual staining equipment
- viii. Instruments for organ evisceration and dissection

#### iv. Case load:

The case load of the programme training centres must **collectively** be able to accommodate the following minimum requirements:

Areas	Minimum Quantity (cases/trainee/year)
Surgical pathology with frozen sections	500 Surgical Histopathological Examination (HPE) including 12 frozen sections
Gynaecology cytology	100
Non-homicidal autopsies	10
Non-gynaecology cytology	100
Fine needle aspiration	25

# v. Case mix:

Areas	Details
Histopathology  (The practice shall include the use of histochemical and immunohistochemical stains, and other ancillary techniques or testing where applicable)	i. Both tumour and non-tumour pathology from both adults and paediatric patients ii. Common organspecific pathology such as, but not limited to, breast, gastrointestinal, genital tract, haematolymphoid, lung, renal, liver, skin, nervous system head and neck and musculoskeletal pathology
Cytopathology  (The practice shall include liquid-based cytology and the use of cell-blocks)	i. Gynaecological and non-gynaecological cytology ii. Fine needle aspiration cytology

		Autopsy pathology (The practice shall include autopsy histopathology)  i. Clinical autopsies ii. Non-homicidal medico legal autopsies	
7	Minimum qualifications and experience of Head of Programme	<ul> <li>i. 5 years or more of working experience after national specialist registration.</li> </ul>	ıl
	(Standard 6.2.2)	ii. Experience in administration and/or academi management.	С

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# **Glossary for Lab Based**

<sup>\*</sup>Relevant body(ies) refers to Department of Standards Malaysia, SIRIM and etc.

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