

## GUIDELINES ON MINIMUM QUALIFICATION, TRAINING AND EXPERIENCE OF PROFESSIONAL PERSONNEL WORKING IN A PATHOLOGY LABORATORY (VERSION 1/2004)

College of Pathologists, Academy of Medicine of Malaysia

There are two main categories of professional personnel working in a pathology laboratory. These are (1) clinical personnel, and (2) technical personnel.

### 1. Clinical personnel

- (a) Clinical personnel are medical practitioners who provide clinical guidance and leadership in the laboratory. They are responsible for pathology reports (i.e. clinical interpretations or professional opinions or consultations of laboratory test results) for the purpose of medical diagnosis or treatment of persons suffering from, or believed to be suffering from, any disease, injury or disability of mind or body. Such reports/opinions also include those for the purpose of prevention of disease and the assessment of the health of a person.
- (b) Personnel providing such clinical interpretations or professional judgment shall possess such qualification, training and experience, relevant to the specialty of pathology in which they practice (e.g.; histopathology, haematology, chemical pathology and medical microbiology).
- (c) Only **medically-qualified pathologists** can provide clinical interpretations of laboratory test results or consultations in the pathology specialty in which he/she is qualified. Qualification is evidenced by a post-graduate qualification in pathology approved by the Government of Malaysia, and at least 3 years of training or working experience in the relevant pathology specialty(ies) whether as part of the pathology qualification training programme or as post-qualification experience.
- (d) **Medical practitioners** working in the laboratory or undergoing formal training in pathology can also provide clinical interpretation, provided that they are under the direction and supervision of a medically-qualified pathologist in that specialty.
- (e) All clinical personnel shall satisfy the requirements of the Malaysian Medical Council to practice in Malaysia.

### 2. Technical personnel

- (a) Technical personnel refer to personnel who perform the scientific and technical work of the laboratory. They may be:
  - (i) a **Scientific Officer**, evidenced by a Bachelor of Science degree or a Bachelor of Biomedical Science degree or an equivalent in a relevant field, recognised by the Government of Malaysia, and at least 6 months of supervised training in the relevant area of laboratory service (whether as part of the degree programme or as post-degree training), **or**
  - (ii) a **Medical Laboratory Technologist**, evidenced by a Diploma in Medical Laboratory Technology or an equivalent, recognised by the Government of Malaysia, and at least 6 months of supervised training in the relevant area of the laboratory service (whether as part of the diploma programme or as post-diploma training).
- (b) **Trainee technical personnel** who are undergoing supervised training in the relevant area of the laboratory service, can also perform technical work, provided that they are under

the direction and supervision of a technical person fulfilling criteria (1) or (2) above, in the relevant area of laboratory service.

- (c) **Technical assistants** with appropriate practical experience and specific training, may undertake work of a repetitive nature provided such work does not involve analytical testing, measurements or validation of results.
- (d) Under defined circumstances, interpretation of results may be provided by technical personnel with specific training and working experience (e.g.; cytopathology, cytogenetics, immunology). Such interpretation should not include advice on clinical management.

**3. The following table charts the minimum qualifications for each category of personnel according to class and specialty of the pathology laboratory**

| Class<br>Specialty   | Laboratory providing test results and reports  | Laboratory providing only test results  |
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| <p><b>Anatomical Pathology</b><br/>(encompassing histopathology and cytopathology)</p> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>histopathologist</b> shall be a medical practitioner registered with the Malaysian Medical Council with a postgraduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in histopathology whether as part of the pathology training programme or as post-qualification experience. Only a histopathologist may issue histopathology reports.</li> <li>• A <b>cytopathologist</b>, shall be a histopathologist with additional training or working experience in cytopathology for at least 6 months. Additional certification in cytopathology is desirable. Only a cytopathologist may issue fine needle aspiration reports and reports of positive cytology smears.</li> </ul> <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least 6 months training in histopathology as part of the training programme or as post-qualification experience.</li> </ul> | <p>There are no Anatomical Pathology laboratories with testing-only services.</p> |

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|                                  | <ul style="list-style-type: none"> <li>• The <b>cytoscientist</b> shall have a Bachelor of Science degree or an equivalent, and have undergone supervised training and evaluation in cytopathology for at least 6 months. A cytoscientist may be authorized to issue reports of negative smears.</li> <li>• The <b>Medical Laboratory Techno-logist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least 6 months training in histopathology as part of the technology training programme or as post-qualification experience.</li> <li>• The <b>cytotechnologist</b> shall have a Diploma in Medical Laboratory Technology or its equivalent and have undergone supervised training and evaluation in cytopathology for at least 6 months. Additional certification in cytopathology such as IAC (CT) or its equivalent is desirable. A cytotechnologist may be authorized to issue reports of negative smears.</li> </ul> |  |
| <p><b>Chemical Pathology</b></p> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>chemical pathologist</b> shall be a medical practitioner registered with the Malaysian Medical Council with a postgraduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in chemical pathology whether as part of the pathology training programme or as post-qualification experience. Only a chemical pathologist may issue chemical pathology reports.</li> </ul>   | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>pathologist</b>, who shall be a medical practitioner registered with the Malay-sian Medical Council with a post-graduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in pathology whether as part of the pathology training programme or as post-qualification experience.</li> </ul> |

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|                           | <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in chemical pathology as part of the training programme or as post-qualification experience.</li> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in chemical pathology as part of the technology training programme or as post-qualification experience.</li> </ul>   | <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in chemical pathology as part of the training programme or as post-qualification experience.</li> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in a chemical pathology as part of the technology training programme or as post-qualification experience.</li> </ul>  |
| <p><b>Haematology</b></p> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>laboratory haemathologist</b> shall be a medical practitioner registered with the Malaysian Medical Council with a postgraduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in laboratory haematology whether as part of the pathology training programme or as post-qualification experience. Only a laboratory haematologist may issue haema-tology reports.</li> </ul> <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in the haematology laboratory as part of the training programme or as post-qualification experience.</li> </ul> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>pathologist</b>, who shall be a medical practitioner registered with the Malaysian Medical Council with a post-graduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in pathology whether as part of the pathology training programme or as post-qualification experience.</li> </ul> <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in haematology laboratory as part of the training programme or as post-qualification experience.</li> </ul> |

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|                                    | <ul style="list-style-type: none"> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in a haematology laboratory as part of the technology training programme or as post-qualification experience.</li> </ul>  | <ul style="list-style-type: none"> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in haematology laboratory as part of the technology training programme or as post-qualification experience.</li> </ul>   |
| <p><b>Medical Microbiology</b></p> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>medical microbiologist</b> shall be a medical practitioner registered with the Malaysian Medical Council with a postgraduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in medical microbiology whether as part of the pathology training programme or as post-qualification experience. Only a medical microbiologist may issue medical microbiology reports.</li> <li>• For a laboratory offering virus isolation and molecular diagnostics services, the medical microbiologist shall fulfill an additional minimum 6 months of recognized training in <b>medical diagnostic virology</b>.</li> </ul> <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in medical microbiology as part of the training programme or as post-qualification experience.</li> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in medical</li> </ul> | <p><b>(1) Clinical Personnel:</b></p> <ul style="list-style-type: none"> <li>• A <b>pathologist</b>, who shall be a medical practitioner registered with the Malaysian Medical Council with a post-graduate qualification in pathology recognized by the Government of Malaysia and at least three years of training or working experience in pathology whether as part of the pathology training programme or as post-qualification experience.</li> </ul> <p><b>(2) Technical Personnel:</b></p> <ul style="list-style-type: none"> <li>• The <b>Scientific Officer</b> shall be a person with a Bachelor of Science degree or an equivalent, with at least six months training in medical microbiology as part of the training programme or as post-qualification experience.</li> <li>• The <b>Medical Laboratory Technologist</b> shall be a person with a Diploma in Medical Laboratory Technology or equivalent, with at least six months training in medical</li> </ul> |

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|  | <p>microbiology as part of the technology training programme or as post-qualification experience.</p> <ul style="list-style-type: none"> <li>• Technical personnel involved in virus isolation and molecular diagnostics services shall fulfill an additional minimum 6 months of recognized training in <b>medical diagnostic virology</b>.</li> </ul> | <p>microbiology as part of the technology training programme or as post-qualification experience.</p> |
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*Note: Depending on the complexity of the techniques and the qualification and training of the professional staff required to provide the services, each specialty with the exception of anatomical pathology, may be categorised into two classes: (A) those that provide clinical interpretation of laboratory results, and (B) those that provide laboratory results without clinical interpretation. Class A services require a pathologist qualified in the relevant specialty, whereas the clinical guidance for Class B services may be provided by a pathologist. Class A services also include Class B services of the same specialty.*

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