GUIDANCE TO CANDIDATES AND TRAINERS

for

ADVANCED SPECIALIST DIPLOMA

in

OPHTHALMIC PATHOLOGY

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Please note the following:

1. The dissection of tissue specimens and reporting of results that may be performed by biomedical scientists, who hold the Advanced Specialist Diploma in Ophthalmic Pathology, remains the responsibility of a consultant pathologist and may only be undertaken with the agreement of the medical head of department

2. This candidate guidance must be read in conjunction with other supporting documents pertinent to this diploma:

    - Principles of Good Practice for Biomedical Scientist involvement in Histopathological Dissection

    - Candidate guidance and Training Logbook for the Institute Advanced Specialist Diploma in Lower Gastrointestinal Pathology Specimen Dissection

    - Candidate guidance and Training Logbook for the Institute Advanced Specialist Diploma in Breast Pathology Specimen Dissection

    - Candidate guidance for the Institute Advanced Specialist Diploma in Cervical Cytology

3. For the purposes of this guidance, the training logbook and diploma, the ophthalmic system is defined as:

   - Corneas
   - Phthisical eyes

ADVANCED SPECIALIST DIPLOMA in OPHTHALMIC PATHOLOGY

INTRODUCTION

The Institute's Advanced Specialist Diploma in Ophthalmic Pathology provides evidence of the attainment of both the necessary scientific and clinical knowledge underpinning the dissection and reporting of ophthalmic pathology specimens. Possession of this diploma will enable you to apply for an appropriate post.

The Institute's professional qualification structure (below) indicates the position of an Advanced Specialist Diploma.

Qualification	Membership Class	Additional qualifications
Professional Doctorate		
Advanced Specialist Diploma ⇧	Fellow	
Higher Specialist Diploma ⇧	Member	Diplomas of Expert Practice & Certificates of Expert Practice
Specialist Diploma ⇧	Licentiate	
Certificate of Competence ⇧		
BSc (Hons) Biomedical Science		

AIMS

1. To develop the professional knowledge and skills of a candidate beyond a Higher Specialist Diploma to the highest level of professional practice

2. To enable successful candidates to undertake a role that involves the description, dissection, block sampling and reporting of ophthalmic pathology specimens

3. To enable successful candidates to offer expert professional advice on ophthalmic pathology specimen dissection and reporting

4. To enable successful candidates to participate in training of biomedical scientists and specialist trainee medical staff in ophthalmic pathology

LEARNING OUTCOMES

Individuals awarded the Advanced Specialist Diploma in Ophthalmic Pathology will be able to:

1. Demonstrate expert professional skills and advanced knowledge beyond those required of biomedical scientists working at the level of a Higher Specialist Diploma

2. Demonstrate full understanding of the physiological and pathological processes associated with the ophthalmic system (as described above)

3. Use highly specialised knowledge and skills to describe and dissect all ophthalmic pathology specimens received in the histopathology laboratory.

4. Independently prepare, critically evaluate and interpret all ophthalmic pathology samples, to initiate further investigations/tests or issue appropriate reports

5. Evaluate, reflect and comment on previous or current clinical/pathological findings as an integral part of case management

6. Demonstrate the ability to operate autonomously whilst recognising the limits of their own competence, seeking advice from consultant colleagues when needed

7. Engage in critical dialogue and work collaboratively with other healthcare professionals to provide a high quality service

8. Continue to develop their own area of practice by keeping up-to-date their professional knowledge and skills

9. Participate in, organise or lead multidisciplinary team (MDT) meetings

10. Demonstrate the knowledge and skills to supervise and participate in the training of biomedical scientists and specialist trainee medical staff in ophthalmic pathology

ELIGIBILITY CRITERIA

The dissection and reporting of ophthalmic pathology specimens constitutes an expert role for biomedical scientists with the requirement to undertake additional duties and responsibilities as part of their professional practice. The minimum requirements for entry to a training programme for the Advanced Specialist Diploma in Opthalmic Pathology are:

- be an HPC registered biomedical scientist

- be a Fellow of the Institute of Biomedical Science

- have at least seven years whole time equivalent post-registration experience in histology

CONSULTANT PATHOLOGIST SUPERVISOR

A biomedical scientist considering undertaking training for the Advanced Specialist Diploma in Opthalmic Pathology requires a named consultant

pathologist supervisor. This is essential in ensuring that a biomedical scientist in training has the necessary support and exposure to material and training to enable the acquisition of these advanced skills knowledge, and ultimately to apply them in their professional practice.

The named consultant pathologist supervisor must be registered on the specialist register with the GMC, currently reporting ophthalmic pathology (as defined previously), meet the minimum RCPath CPD requirements and participate in an appropriate EQA scheme.

The consultant pathologist supervisor must:

1. Guide and direct the training process

2. Regularly review progress during the training period, which must include direct observation of practical skills, evidence of case reviews

3. Set agreed learning plans with candidate

4. Be able to arrange for the biomedical scientist to obtain training in all the required areas

5. Inspect the portfolio prior to submission to the Institute to ensure it meets the requirements specified in the guidance to candidates

6. Sign the declaration in the logbook to confirm that the candidate has undergone training, and in his/her opinion is competent and ready to sit the examination

The consultant pathologist supervisor and the biomedical scientist in training must comply with all relevant IBMS and RCPath guidelines and standards.

LABORATORY REQUIREMENTS

The laboratory where the training is undertaken should be a CPA (Clinical Pathology Accreditation (UK) Ltd) registered laboratory. The laboratory must also have Institute training approval. The laboratory manager must support the

training of biomedical scientists in the dissection and reporting of ophthalmic pathology specimens.

DELIVERY OF TRAINING

Training must be delivered in accordance with the IBMS/RCPath training logbook for the Advanced Specialist Diploma in Ophthalmic Pathology. Completion of training is evidenced by submission of the signed logbook and compilation of a portfolio that contains evidence of regular assessments of competence in dissecting and reporting appropriate ophthalmic pathology specimens by a named consultant pathologist supervisor. If the repertoire of the training laboratory is not comprehensive enough to allow exposure to the widest spectrum of ophthalmic pathology it is considered good practice for biomedical scientists to visit other laboratories to share expertise and to learn different techniques. This may require the delivery of training by individuals other than the named consultant pathologist supervisor, and who must also conduct appropriate assessments of competence as described below.

The sub-speciality training component of this training programme is best served by participation in current specialist ophthalmic pathology and related activities, in close association with a consultant specialising in this area. The overall aim of the training programme is to develop advanced knowledge, attitudes, dissection and reporting skills in ophthalmic pathology. Training of biomedical scientists in ophthalmic pathology must not detract from the training of histopathologists in these areas.

ONGOING ASSESSMENT OF COMPETENCE

In-house assessments of competence must be an interactive continuous process between the supervising pathologist and the biomedical scientist which must include the use of direct observation of practical skills, case-based discussion or equivalent processes. Regular reviews of progress are essential for the setting of agreed learning plans and as part of an ongoing personal development plan.

PORTFOLIO OF EVIDENCE

The compilation of a portfolio is a means of clearly organising and recording achievements and should demonstrate a range of competencies, skills, experience and an overall reflective approach to learning. This must also include a record of any formal assessments carried out during the training period, including a formal observation of the practical skills of the biomedical scientist carried out by a visiting assessor. It must be submitted to the Institute, along with the training logbook, as part of the evidence for completion of training in ophthalmic pathology prior to the examination. In addition to the common requirements in the generic guidance, the portfolio must contain:

- six different case studies that reflect the case-mix within ophthalmic pathology encountered by the biomedical scientist during the training period. The significance of histopathology within the context of the 'patient pathway' from initial clinical presentation through surgical operation to treatment should provide the framework for each case. Details about possible differential diagnoses should be included to show understanding of the clinical/pathological context of the cases. These cases must correlate clinical details and/or patient imaging with gross and dissected appearances, and with subsequent histological diagnosis. These case studies must include at least one from each of the following categories:
  - whole eye
  - cornea
  - tumour excision (plastic surgery)
  - orbital exenteration
  - evisceration
  - any other candidate chosen case study

- a log of the case repertoire encountered during the full period of training and demonstrating at least two years of practice in ophthalmic pathology, detailing the scope and number of specimens dissected and reported, and presented in module format. This should include evidence of adverse incidents and examples of 'best' practice

- a record of training programmes or courses attended
- evidence of regular case review with the supervising pathologist(s) that should demonstrate critical evaluation of the dissection and reporting of ophthalmic pathology specimens by the biomedical scientist. The case review will also show evidence of knowledge and understanding of the patient's diagnosis and the possible impact on their subsequent treatment and outcome. This should form part of the evidence for continuing audit of the biomedical scientist in training

- a record of multidisciplinary team meetings (MDT) attended

- details of any seconded experience

- formal observation of the practical skills of the biomedical scientist must include:

    - on-going assessment carried out by the consultant pathologist supervisor during training period.

    - observations carried out by an external observer.*

- details of in-house assessments and audit of personal practice against local or nationally published performance targets

- reflection on the whole learning process

***Guidelines for external observation and assessment**

The external observer will be nominated by the Advanced Specialist Diploma group for Ophthalmic Pathology.

It is intended that this observation and assessment should be undertaken on a regional basis. A consultant pathologist observer must have a licence to practice issued by the GMC, be currently reporting ophthalmic pathology, meet the minimum RCPath CPD requirements and participate in appropriate EQA Schemes where they exist. The consultant pathologist observer should come

from a laboratory in which biomedical scientists dissect and report ophthalmic pathology specimens.

The candidate would be expected to ensure that a range of specimens were available for observation. The assessment will last a maximum of two hours and would take place in three stages:

- Pre dissection discussion and specimen preview
- Dissection
- Post dissection/reporting discussion/review/feedback

It is anticipated that each stage would be interactive and that questions could be asked or advice sought as appropriate. An assessment sheet has been developed to facilitate the process. The result of this observation should be communicated to the trainee and supervisor. Any issues raised must be addressed and resolved, and be included as part of the portfolio.

The portfolio must be submitted to the Institute for assessment by the published closing date. The portfolio assessment must be passed before entry to the final examination is permitted.

CASE STUDIES

The six different case studies reports will be appropriate to the complexity of the specimen and be at least 1000 ± 10% words in length. They should be prepared using aspects of the following format to bring a whole case history together supplemented by comments on options available to clinicians as the case progresses. Each case study must also include:

- patient clinical history
- macroscopic description of gross specimen
- correlation of any clinical/imaging/ findings with the pathology specimen
- details of dissection procedure
- block selection – number and area sampled
- requirements for extra blocks (if applicable) in light of additional patient information

- correlation of the relevance of macroscopic description and block selection to final diagnosis and subsequent patient management
- details of any interpretive report issued (as appropriate)
- details of possible differential diagnoses (if applicable) where they show a critical understanding of the clinical/pathological context
- the timeline from surgery/reception to the final MDT outcome
- knowledge and reasoned argument of sufficient depth and clarity
- adequate and appropriate references to key sources of information

The following sections provide further guideline to content of a case study:

PRE-ANALYSIS

Details of presenting symptoms and any additional relevant clinical history should be used to introduce the case. The clinical symptoms may be expanded upon and any additional laboratory tests, including previous biopsy or surgery should be critically discussed. Ultrasound or other imaging results may be included at this stage. The surgical procedure selected and the subsequent removal of tissue for histological examination should be put into context with the patient's overall treatment plan, e.g. results may be discussed at a MDT meeting to include compliance with the appropriate cancer standards.

ANALYSIS

The way the specimen is handled when it arrives in the cellular pathology laboratory should be discussed, e.g. whether fresh or formalin fixed, to include accurate details of the dissection process, blocks taken, macroscopic and (when appropriate) microscopic description. Evaluation and impact of imaging findings and clinical history should be demonstrated. The main histological features should be discussed and details of the stains and antibodies used on the case should be explained to show evidence of slide review. Where a panel of markers have contributed to the final diagnosis these should be discussed, together with possible options of other specialised tests.

POST ANALYSIS

The outcomes for the patient should be discussed to include evidence of follow-up treatment, and the relationship of that treatment to the diagnosis. This should include a record of any MDT discussions and the outcomes.

COMPLETION OF TRAINING

Once the named consultant pathologist supervisor and the laboratory manager are satisfied that the training is complete, the candidate may contact the Institute for an examination application form. The candidate will be notified when the application has been accepted and will then be required to submit a completed portfolio by a specified date. Progression to the end point assessment for the Advanced Specialist Diploma in Ophthalmic Pathology is dependent upon the satisfactory assessment of the portfolio.

Success in the examination will be recognised by the awarding of the Advanced Specialist Diploma in Ophthalmic Pathology.

END POINT ASSESMENT

1. Successful portfolio assessment
2. Written examination including case-based scenarios
3. Practical microscopy examination
4. *Viva voce* examination including case-based scenarios and defence of the portfolio

ASSESSMENT OF THE PORTFOLIO

Once submitted, the portfolio will be independently assessed by two members of the ASD group for ophthalmic pathology, using the following categories.

- Case log
- Case review

- Case studies
- Formative assessments
- Audit
- Tutorials and training sessions
- General overview of portfolio

There are a total of 31 standards across the above categories that must be met in order to achieve a pass and progress to the end point assessment.

Note: All evidence submitted as part of the portfolio must conform to the Data Protection Act (2003).

All evidence which is submitted as part of the portfolio that may identify an individual must be made anonymous, but in such a way that allows identification to be re-established subsequently if appropriate.

- The use of a marker pen to blank out this information is often insufficient and its use is discouraged
- The use of correction fluid or tape is not permitted

Portfolios that contain evidence that allows identification of a patient will be automatically referred and may not be resubmitted until the following year

ASSESSMENT STANDARDS

The portfolios will be assessed using the following standards:

Case log

1. The log is clearly laid out and accessible.
2. The log must reflect a variety of cases in order to assess candidates' scope of professional practice
3. The mix of cases is in accordance with the modules or subjects in which the candidate claims experience

Case review

4. There is evidence that regular case reviews have taken place
5. The reviews are clearly laid out and accessible
6. There is a clear indication of the purpose of case review and that this has been undertaken by the candidate and the consultant pathologist supervisor
7. It is clear from the evidence presented that the candidate has an understanding of the impact of laboratory tests on diagnosis, treatment, monitoring and prognosis of patients
8. The reviews show clearly that points of interest have been used as a positive learning experience
9. Evidence of MDT discussion of cases dissected and reported by the biomedical scientist in training together with the minutes and outcomes included. Attendance at MDTs must be regular enough to ensure appropriate discussions take place and during training will require the biomedical scientist to attend 1 in every 4 MDT (or at least 12 per year) meetings held, where the cases dissected or reported by them are discussed

Case Studies

10. Studies are neat, well laid out and of appropriate length
11. Details of initial clinical presentation, imaging results, previous medical history and tests performed are included in each study
12. The significance of laboratory tests within the context of the patient pathway is explained
13. Where appropriate, there is differential diagnosis and discussion of reasons
14. Details of appropriate ancillary tests, management, treatment and follow-up are presented in each case study
15. Illustrations or images when used, are relevant and of high quality
16. The case mix matches the requirements set out in the logbook

Formative Assessments

17. It is clear from the evidence presented that systematic and periodic review of the candidate's performance throughout the training period has been undertaken by the consultant pathologist supervisor

18. It is clear from the evidence that the consultant pathologist supervisor has observed the entire range of specimens

19. It is evident from the details presented how the candidate's practice has evolved over the course of the training period by the inclusion of incident logs and competence assessments

20. The individual in training has been formally observed dissecting and reporting a range of mutually agreed pathology specimens, to a satisfactory standard by an external assessor approved by the ASD group for ophthalmic pathology

Audit

21. There is evidence that the candidate understands the principles of audit (service and clinical)

22. It is clear from the evidence presented that the candidate has gathered data relevant to his or her own practice

23. There is evidence of critical evaluation and implementation of audit outcomes where appropriate

Tutorials and training sessions

24. A record of training programmes, short courses, tutorials and in-house training sessions attended or delivered by the candidate has been included

25. Examples are accompanied by evidence of reflection on the learning outcomes

General overview

26. The portfolio is neat and tidy

27. There is a useful and accurate index

28. Sections are easily found and correctly labelled

29. The portfolio is written in English prose with the correct use of grammar and punctuation

30. There is no evidence of plagiarism

31. Evidence presented is high quality, relevant and shows appropriate reflection

If following the assessment the candidate has not met all the standards and their portfolio is referred, or the two assessors' marks differ significantly, the portfolio will be reviewed by a third assessor and moderated accordingly.

Written Examination

The format of this paper is to cover case-based scenarios encountered in ophthalmic pathology and may also include questions on clinical governance, pathological processes or relevant topical matters.

This examination will last 90 minutes and its format will vary dependent on the questions asked. The candidate will be expected to answer all questions set

Practical microscopy examination

This examination will last 90 minutes and will include 6 corneas and 3 other pathologies. The candidate will be expected to answer all questions set and the answers must include a summary report with key findings (either as a conclusion/diagnosis or a clear way forward such as discussion with a pathologist/differential diagnoses or the request of further tests)

Format of *viva voce*

The portfolio would be the framework for the *viva voce* examination, using the case studies and other evidence to base any associated questions upon. It is expected that the academic rigour of the *viva voce* would be that used when defence of a doctoral qualification is being undertaken and would last 45-60 minutes

Marking Structure

All examination papers will be marked by two examiners, referring to a third, independent, examiner if appropriate. All marks are subject to moderation and ratification by the Institute's Conjoint Examination Board

Pass Mark

Candidates will be required to achieve a minimum of 50% in each of the written paper and the oral assessment, and a minimum of 60% overall

TRAINING PROGRAMME

The training programme for biomedical scientists wishing to obtain the Advanced Specialist Diploma in Ophthalmic Pathology is guided by recommendations made by the following reports, documents and guidelines:

- the Report of the Joint Working Party of the Royal Colleges of Ophthalmologists and Pathologists on Ophthalmic Pathology concerning training and manpower in Ophthalmic Pathology (1998)
- the final report from the Royal College of Pathologists and Institute of Biomedical Science Working Group on the implementation of the extended role of the biomedical scientists in specimen description, dissection and sampling (2004)
- Modernising Pathology Services. DH (2004)
- the Institute of Biomedical Science and Royal College of Pathologists training logbooks for the Advanced Specialist Diplomas in Breast and Lower GI Pathology Specimen Dissection (2010)