



**GUIDANCE TO CANDIDATES AND TRAINERS
ADVANCED SPECIALIST DIPLOMA (ASD)
IN PLACENTAL
HISTOPATHOLOGY REPORTING**



The Royal College of Pathologists
Pathology: the science behind the cure

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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, remains the responsibility of a consultant pathologist and may only be undertaken with the agreement of the medical head of department.
2. This document must be read in conjunction with the Principles of Good Practice for Biomedical Scientist involvement in Histopathological Dissection guidance document and the joint statements from the RCPATH and IBMS on 'Scientist Reporting of Histopathology Samples: Practice and Competencies' and 'The Role of Scientists in Histopathology Reporting.

INTRODUCTION

The IBMS/RCPATH Advanced Specialist Diploma (ASD) in Placental Histopathology Reporting provides evidence of the attainment of both the necessary scientific and clinical knowledge underpinning placental reporting. This diploma is a limited-scope qualification focused solely on placental histopathology reporting. A broader scope in other areas of perinatal/paediatric pathology is outside the scope of this diploma.

AIMS

1. To develop the professional knowledge and skills of a candidate to a high level of professional practice in all aspects of placental histopathology.
2. To enable successful candidates to undertake a role that involves the description, dissection, block sampling and reporting of a defined range of placental specimens.
3. To enable successful candidates to offer expert professional advice on dissection and reporting of placental pathology specimens.
4. To enable successful candidates to participate in the training of scientists and specialist trainee medical staff in placental specimen dissection and audits.

The Advanced Specialist Diploma (ASD) has two stages. The curriculum content for this qualification is shown in detail in Appendix A and it is assessed through the submission of a portfolio and an examination at the end of the stage. Success in the portfolio and the examinations leads to the award of the RCPATH/IBMS Advanced Specialist Diploma (ASD) in Placental Histopathology Reporting.

After the successful completion of the ASD qualification candidates will proceed to a post qualification 'preceptorship' stage that involves the development of a supervised specific independent reporting plan.

The purpose of this is to support the individual to achieve a level of post-qualification competence and confidence consistent with that of a qualified medical consultant histopathologist to independently report defined specimen types. Successful completion of this preceptorship stage does not confer automatic eligibility to practice as this remains the decision of the employer and the clinical head of department.

LEARNING OUTCOMES

Individuals awarded the ASD in Placental Histopathology Reporting will be able to:

1. Demonstrate detailed understanding of the physiological and pathological processes associated with a range of placental specimens.
2. Use highly specialised knowledge and practical skills to describe and dissect a range of placental specimens to enable accurate histopathological reporting.
3. Independently prepare, critically evaluate and interpret the specified placental pathology samples to initiate further investigations/tests if required or issue appropriate reports.
4. Evaluate, reflect and comment on previous or current clinical/pathological findings as an integral part of case management.
5. Demonstrate the ability to operate autonomously in certain specimens (defined in the curriculum in Appendix A of this document) whilst recognising the limits of their own competence, seeking advice from consultant level colleagues as and when required.
6. Engage in critical dialogue and work collaboratively with other healthcare professionals to provide a high-quality service.
7. Continue to develop their own area of practice by keeping their professional knowledge and skills up to date.
8. Participate in the local perinatal mortality (PMRT) meetings.
9. Demonstrate the knowledge and skills to supervise and participate in the training of others in placental pathology dissection and reporting.
10. Develop contextual clinical knowledge in fetal medicine, obstetrics, and neonatology.

ELIGIBILITY CRITERIA AND LABORATORY REQUIREMENTS

The histological dissection and reporting of placental pathology specimens constitute an advanced clinical practice role for 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 ASD in Placental Histopathology Reporting are:

- registration with the HCPC as a Biomedical Scientist or Clinical Scientist

- Membership (MIBMS) or Fellowship (FIBMS) of the Institute of Biomedical Science
- at least five years whole time equivalent post-registration experience in histopathology

Applicants must be working in a United Kingdom Accreditation Service (UKAS) registered laboratory which can clearly support their training with a view to the trainee eventually becoming a member of the Histopathology Reporting Team. Successful applicants need to demonstrate a commitment from their Trust to provide both an Educational Supervisor and Clinical Supervisor who will support the applicant through the training period.

Applicants must submit the following documentation to the IBMS:

- Completed expression of interest form (available on the IBMS website)
- Evidence of commitment from their proposed Educational Supervisors and Clinical Supervisor/Director through the provision of their details on the expression of interest form and a work/ job plan that must indicate the protected time the applicant will be given in order to undertake the pathway that they are applying for
- A letter of support from the Clinical Director and Medical Head of Department
- A 300-word personal supporting statement which details your current role and experience and suitability for the programme

These documents must be submitted to examinations@ibms.org and the Board reserves the right to undertake interviews although it is planned that admittance on to the training programme will depend solely on the information provided by the applicant. Only once an applicant is accepted on to the qualification can they start collecting evidence for their portfolio.

CONSULTANT PATHOLOGIST SUPERVISORS

There should be at **least two** placental or paediatric pathology consultant pathologists for training and supervision, though in future, experienced diploma-qualified scientists could also support aspects of supervision. This is essential in ensuring that the scientist in training has the necessary support and exposure to material and training to enable the acquisition of these advanced skills and knowledge, and ultimately to apply them in their professional practice.

Training biomedical scientists should not displace paediatric and perinatal pathology trainee case exposure and ensure adequate case volumes for both scientist and medical training pathways.

The named consultant pathologist supervisors must be registered on the specialist register with the GMC, appropriately trained to carry out educational supervision, meet the minimum RCPATH CPD requirements. One of these consultant pathologists must take the lead in the training of the scientist and must:

1. Guide and direct the training process.
2. Regularly review progress during the training period, which must include direct observation of practical skills and evidence of case reviews carried out by clinical supervisors and other members of staff.
3. Set agreed learning plans with candidate.
4. Be able to arrange for the scientist to obtain training in all the required areas with appropriate clinical supervision.
5. Review the portfolio prior to submission to the Conjoint Board to ensure it meets the requirements specified in the guidance to candidates.
6. Sign a declaration to confirm that the candidate has undergone training, meets the requirements of the stage concerned and in their opinion is competent and is ready to sit the examination.

The consultant placental or paediatric pathologist supervisors and the scientist in training must comply with all relevant IBMS and RCPATH guidelines and standards. It is expected that at least one other consultant pathologist will support the lead consultant pathologist supervisor in the delivery of the training including case reviews and work-based assessments.

DELIVERY OF TRAINING

The overall aim of the training programme is to develop advanced knowledge, attitudes and reporting skills in placental pathology. Training of scientists in this pathology must not detract from the training of histopathologists in these areas. Training must be delivered in accordance with the IBMS/RCPATH training curriculum described in Appendix A.

Completion of training is evidenced by submission of a signed log of reported specimens and compilation of a portfolio after each stage of the qualification. The portfolio must contain evidence of regular assessments of competence in reporting appropriate placental pathology specimens by a consultant pathologist supervisor.

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.

DURATION OF TRAINING

The training for the ASD qualification and the post qualification preceptorship stage must take a minimum of 36 months to complete.

The first stage, lasting 24 months, will focus on building up the candidates' experience of the reporting of placental pathology specimens and concludes with the submission of a portfolio and end of stage exam. Success in these will lead to the award of the Advanced Specialist Diploma (ASD) in Placental Histopathology Reporting

Stage Two, lasting 12 months, is a preceptorship and will consist of a period of supervised semi-independent reporting. Success in this stage will lead to the award of Certificate of Completion.

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.

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. The submitted portfolio must contain:

- a log of the case repertoire encountered during the training period. There must be an indicative 1,000 cases included in the case log (500 per year) to demonstrate the practical experience of the candidate. The candidate is expected to demonstrate experience in placental pathology, detailing the scope and number of specimens reported. This should include evidence of adverse incidents and examples of 'best' practice. There can be an indicative 125 previously reported cases each year included in the case log. (See Appendix A for details of the specimen types to be included in the log)
- evidence of regular case review with the supervising pathologist(s) that should demonstrate critical evaluation of the reporting of placental 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 scientist in training.

- details of in-house assessments (including progress reports). The candidate's educational supervisor must complete a progress report with the candidate every six months. The reports should be submitted within the portfolio at the end of the Stage. These reports should use the form in Appendix B.
- formal observation of the practical skills and assessment of the applied knowledge of the biomedical scientist must include on-going assessments carried out by the consultant pathologist supervisor during training period evidenced through the provision of a minimum of nine Workplace-Based Assessments (WBA) forms:
 - Case-based discussion (CBD) x 6
 - Direct observation of practical skills (DOPS) x 6
 - Evaluation of clinical events (ECE) x 6

These are provided in Appendix D. Examples of each type of workplace-based assessment are specified in the curriculum section of this document (Appendix A).

- audit(s) of personal practice and clinical audits against local or nationally published performance targets. The completion of at least two audits are required for the portfolio one of which must be a clinical audit.
- formative assessments – evidenced through the provision of a multi-source feedback (MSF) form (See Appendix C) which must include a minimum of ten respondents and must include Consultant Histopathologists, Medical Trainees (where possible), scientists and other members of laboratory staff.
- a minimum of one clinicopathological case study (see below for more details)
- a record of perinatal mortality meetings attended and evidence of participation in these meetings through the provision of relevant notes on the discussions held on cases including some reported by the candidate.
- a record of training programmes, courses, tutorials or training sessions attended with evidence of reflection.
- reflection on the whole learning process.

CASE STUDY

Each clinicopathological case study must be at least 1500 ± 10% words in length and 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. It 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
- details of requesting and interpreting of immunocytochemistry and molecular tests (where appropriate)
- 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
- details of management suggestions to aid the clinical team if appropriate
- 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 perinatal mortality 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.

PERINTAL MORTALITY MEETINGS

Evidence of attendance at a minimum of 12 perinatal mortality meetings where cases reported by the biomedical scientist in training are discussed. There should be evidence of the discussion of the cases reported by the biomedical scientist, and other cases the candidate found interesting and informative, in the form of details of the cases and the outcomes of the discussion and reflection by the candidate on the meeting.

ASSESSMENT OF TRAINING

Once the named consultant pathologist supervisors are satisfied that the training for the stage is complete the candidate must submit the completed portfolio to the Institute by the specified date. Candidates must pass the portfolio and examination before they can proceed to the post qualification 'preceptorship' stage which is described in the separate document.

ASSESSMENT OF THE PORTFOLIO

Once submitted, the portfolio will be assessed by using the following categories:

- Case Log
- Case Review
- Case Study
- Formative (work-based) Assessments
- Audit
- Tutorials and Training Sessions
- General Overview

Note: All evidence submitted as part of the portfolio must conform to the Data Protection Act (2018) which is the UK's implementation of the General Data Protection Regulation (GDPR).

All evidence which is submitted as part of the portfolio that may identify an individual patient must be made anonymous, but in such a way that allows identification to be re-established subsequently if appropriate. Portfolios that contain evidence that allows on a small number of occasions identification of a patient will be automatically returned.

Candidates will be given time to amend the portfolio so the patient cannot be identified. If, however there are multiple incidents of evidence that allows for the identification of patient the portfolio will be marked as a fail and will not be allowed to be resubmitted until a date that would be set by the portfolio examiners. Candidates are therefore strongly encouraged to check that such evidence is not included within the portfolio.

ASSESSMENT STANDARDS

The portfolios will be assessed using the following standards:

Case Log

1. The log is clearly laid out and accessible.
2. The mix of cases shown in the log must be in accordance with the curriculum requirements stated in the appropriate stage. (See Appendix A for more information.)

Case Review

3. There is evidence that regular case reviews have taken place.
4. The reviews are clearly laid out and accessible.
5. 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.

6. It is clear from the evidence presented that the candidate has an understanding of the impact of laboratory tests on diagnosis, treatment, monitoring, prognosis and reporting of patients.
7. The reviews show clearly that points of interest have been used as a positive learning experience.
8. Evidence of attendance at perinatal mortality meetings with notes on the discussion of cases reported by the biomedical scientist in training and other cases of interest together with the minutes and outcomes included. Attendance must be regular enough to ensure appropriate discussions take place and during training will require the biomedical scientist to attend at least 12 meetings.

Case Study

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

Formative Assessments

15. It is clear from the evidence presented, including the provision of the specified minimum number of work-based assessment forms and progress reports, that systematic and periodic review of the candidate's performance has been undertaken by the consultant pathologist supervisor.
16. It is clear from the evidence provided in the work-based assessment forms that the consultant pathologist supervisor has observed the reporting of the entire range of specimens.
17. 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.

Audit

18. There is evidence that the candidate understands the principles of clinical audit.
19. It is clear from the evidence presented that the candidate has gathered data relevant to his or her own practice and that of their colleagues.
20. There is evidence of critical evaluation and implementation of audit outcomes where appropriate.

Tutorials and Training Sessions

21. A record of training programmes, short courses, tutorials and in-house training sessions attended or delivered by the candidate has been included.
22. Examples are accompanied by evidence of reflection on the learning outcomes.

General Overview

23. There is a useful and accurate index and relevant sections are easily found.
24. There is no evidence of plagiarism.
25. Evidence presented is high quality, relevant and shows appropriate reflection.

The portfolio will be marked by examiner(s) appointed by the Conjoint Board. On review the portfolio examiners may decide that a portfolio has not yet met the required standards but is close to doing so. These portfolios will be marked as a 'refer'. In these circumstances individuals will be notified of the shortcomings and will be given a specified period to address these issues. The additional evidence must be submitted by the deadline stated by the Institute at which time it will be re-assessed. At this point the portfolio will be either be awarded a 'pass' or 'fail'.

Candidates whose portfolio is deemed to have significant deficiencies (three or more of the portfolio assessment indicator standards not being met) and therefore not to have met the requirements of the qualification the portfolio will be marked as a fail and will not be able to proceed to the next stage of the qualification.

EXAMINATION

The exam that candidates will undertake is akin to the FRCPath Part 2 paediatric pathology examination and consists of the placental and viva components. The viva may also include relevant knowledge questions and questions on clinical governance, pathological processes

or relevant topical matters. Both components must be passed before a candidate can proceed to the preceptorship stage. Overall, the biomedical scientists reporting placenta independently must demonstrate comparable interpretive skill to medical pathologists.

The examination will be run by the College Exam Team in accordance with the RCPATH 'Examination Regulations and Guidelines' document with the examination being marked by at least two examiners and all marks are subject to moderation and ratification by the Royal College of Pathologists Examinations Committee.

EXAMINATION RE-SITS

On their first attempt, candidates will be expected to undertake all parts of the examination. If a candidate fails the examination, they will be required to resit the parts of the examination they were unsuccessful in on their previous attempt. A re-sit fee will apply. Candidates will be expected to continue to report on the range of specimens listed in the curriculum in between their attempts at the examination.

Appendix A - Curriculum for RCPATH/IBMS Advanced Specialist Diploma (ASD) in Placental Histopathology Reporting

SUPERVISION AND FEEDBACK

Specialist training must be appropriately supervised by the senior medical and scientific staff on a day-to-day basis under the direction of a designated educational supervisor. Supervision has more than one meaning in histopathology. Trainees will work under consultant supervision, gradually widening their knowledge and experience in each area. The day-to-day supervised training will be supplemented by more formal teaching such as 'black box' sessions and on regionally and nationally organised training courses.

If a histopathology report generated by the trainee states that they have been supervised by a consultant, this is usually taken to mean that the consultant has examined that report with the trainee. It also implies that the consultant accepts not only the microscopic but also any macroscopic description as accurate, even if the supervisor has not personally reviewed the specimen. However, there is also a more general level of supervision in day-to-day work. A trainee may ask for assistance at any time if a specimen they are dealing with is unfamiliar or unusual. Supervision also extends to working relationships and communication within and beyond the histopathology department.

Educational supervision is a fundamental conduit for delivering teaching and training in the NHS. It takes advantage of the experience, knowledge and skills of educational supervisors/trainers and their familiarity with clinical situations. It ensures interaction between an experienced clinician and the trainee. This is the desired link between the past and the future of medical practice, to guide and steer the learning process of the trainee. Clinical supervision is also vital to ensure patient safety and a high-quality service.

The role of the educational supervisor is to:

- have overall educational and supervisory responsibility for the trainee in a given post
- ensure that the trainee is familiar with the curriculum relevant to the stage of training of the post
- ensure that the trainee has appropriate day-to-day supervision appropriate to their stage of training
- ensure that the trainee is making the necessary progress during the post
- ensure that the trainee is aware of the assessment system and undertakes it according to requirements
- act as a mentor to the trainee and help with both professional and personal development
- agree a training plan (formal educational contract) with the trainee and ensure that an induction (where appropriate) has been carried out soon after the trainee's appointment

- discuss the trainee's progress with each trainer with whom a trainee spends a period of training
- undertake regular formative/supportive appraisals with the trainee (two per year, approximately every 6 months) and ensure that both parties agree to the outcome of these sessions and keep a written record
- regularly inspect the trainee's training record, inform trainees of their progress and encourage trainees to discuss any deficiencies in the training programme, ensuring that records of such discussions are kept

Expected training

The level of knowledge gained within each of the areas described below will vary between trainees. However, for each disease process listed, it is recommended that the trainee possesses at least a basic level of knowledge within the following eight categories.

- Epidemiology
- Aetiology
- Pathogenesis
- Clinical features
- Pathological features (macroscopic and microscopic)
- Natural history
- Management options
- Major complications of therapy

It is important that sufficient basic knowledge of major pathological processes is gained at this early stage. This should include topics such as: causes of and responses to cellular injury, acute and chronic inflammation, neoplasia, the effects of genetics and the environment in health and disease, infections and the basics of immunology

Advanced Specialist Diploma (ASD) Placental Histopathology Reporting

The training for the ASD in Placental Histopathology Reporting and the post-qualification preceptorship stage must take, in combination, a minimum of 36 months to complete. It is expected that this stage will last a minimum of 24 months. The aims of this ASD are to provide:

- a structured introduction to placental histopathology
- practical training in placental dissection and reporting

Competences required at the end of this training:

- independent cut-up of placental specimens
- ability to write an appropriate standardised report for placental specimens
- independent reporting of placental pathologies,
- ability to demonstrate time management and task prioritisation (e.g., prioritisation of specimens for cut-up and reporting, timely turn-around of reporting histopathology, keeping portfolio up to date)

The end of qualification process will mirror the Annual Review of Competence Progression (ARCP) process. It is evidenced through the submission within the portfolio of:

Practical experience:

- surgical histopathology an **indicative** 1,000 reported cases and evidence of regular case reviews
 - A maximum of 125 cases per year can be previously reported cases.
- audit completion of two audits
- continuous development completion of one educational case report / study
- MDTs participation in regular perinatal mortality meetings

Assessments:

- workplace-based assessments a minimum of 18 in total, all directed (see below)
- multi-source feedback one completed and satisfactory
- progress reports to be completed every six months
- educational supervisor's report satisfactory

The portfolio is reviewed by examiner(s) appointed by the RCPATH/IBMS Conjoint Board against the portfolio assessment indicators stated in this guidance. The final part of the examination is described earlier in this document. Candidates can only progress to the post-qualification preceptorship stage with the successful completion of their portfolio and a pass in the formal examination

CLINICAL GOVERNANCE

- The requirement to ensure that the specimen number on the request form and on the specimen container match correctly
- The requirement to check that the patient details on the request card and on the pot match correctly
- The importance of correctly dictated patient details
- The importance of correct specimen identification and orientation in the patient management process
- How to deal with inadequately or incorrectly labelled specimens and incomplete requests
- When specimens need referral to a consultant pathologist or an experienced biomedical scientist
- The risk to the patient of diagnostic errors
- How transposition errors can impact on patient treatment
- The type of specimens that require respectful disposal
- The current guidelines and regulations for dissection and retention of tissues including the appropriate Codes of Practice of the Human Tissue Authority
- The principles of clinical audit.
- The mechanisms and methods of demonstrating audit and analysis of own performance against an agreed set of criteria
- The principles and maintenance of patient confidentiality
- The requirements for full SOP and risk assessment compliance
- The principles of incident reporting, risk assessment and root cause analysis
- The mechanisms and methods of demonstrating reflection on the learning outcomes within own practice

GENERAL PRINCIPLES OF PLACENTAL DISSECTION

- Medical terminology and the importance of clinical history in determining block selection
- The purpose and application of SOPs for tissue dissection
- How to describe the dissection process accurately using diagrams, standardised formats and terminology where appropriate
- The local procedures for accurate numbering of cassettes
- How to mark margins and orientate specimens to allow accurate assessment

- How to measure, weigh and describe placenta using standard terminology
 - How to use dissection equipment
 - When to use specimen macrophotography
 - The relevance of appropriate tissue sampling
 - How to record the number and location of where the blocks originate
 - How to prevent carry over or contamination of specimens
 - How to ensure the embedder has informative instructions to allow appropriate orientation and embedding
 - When specimens require to be wrapped or contained to prevent loss during processing
 - Specimens that are within and without their scope of practice and when to pass the specimen on to others
 - How to dissect high risk specimens safely
- How to dissect specimens for specialist testing e.g. genomic studies, bio-banking and clinical trials

PLACENTAL PATHOLOGY

INTRODUCTION TO PLACENTAL DISSECTION	• SOPs, working in the mortuary. • Development of the placenta. • Clinical significance of pathological diagnosis of placentas, typical groups of clinical indications. • Principles of triaging placentas. • Discussing clinical request form, understanding need of minimal dataset of clinical information. • Getting familiar with macro examination sheet. Importance of documentation. • Basics of macroscopic examinations- equipment, tools, use of camera. • Steps of examination procedure (ID check, measurements, topographic assessment, preparing membrane roll, identifying parenchymal involvement in case lesion is present)
PRIMARY TRIMMING PRACTICE	• Primary trimming of routine placentas with various indications studies previously
EXTERNAL EXAMINATION OF PLACENTA	• Abnormal placenta shape (recognising succenturiate, bilobed, membranaceous placentas, thick or bulky specimen, distinguishing from artefacts) • Importance and possible consequences of abnormal shape. Relevance of thin placenta.

	• Clinicopathological issues of large/oedematous/congested placentas (fetal hydrops, anaemia, Parvovirus, CMV, isoimmunisation, maternal diabetes etc.). • Membrane discolouration meconium staining, chorioamnionitis related changes, retro membranous haemorrhage, haemosiderin pigmentation) • Abnormal shape, and membrane abnormalities.
RECOGNISING AND DESCRIBING PATHOLOGICAL LESIONS	• Pathological changes of the fetal surface (membrane discolouration as above, subchorionic haemorrhage, cyst, fibrin, fetal chorionic vessels. Relevance of fetal chorionic vessel thrombosis) • Pathology of the villous parenchyma: importance of assessment of the involved volume, acute infarcts, chronic infarcts, perivillous fibrin deposition, intervillous haemorrhage or thrombus. • Distinguishing fresh and organised lesions. Distinguishing true parenchymal lesions from subchorionic abnormalities. • Evaluation of the maternal surface; signs of preterm separation (acute abruption, sub-acute abruption, chronic abruption, marginal abruption based on presence or absence of crater, indentation, adherent fresh or organised clots, clinical history, excess blood within container etc.)
UMBILICAL CORD	• Macroscopic pathology of the umbilical cord (long cord, short cord, coiling index, entanglement, false knots, true knots, number of cord vessels, perivascular lesions: haemorrhage, necrotising funisitis, umbilical vessel thrombosis) • Membrane lesions; circummarginate, circumvallate, retromembranous clot, amnion nodosum, squamous metaplasia, amniotic rupture, amniotic bands, cysts in membranes.
PLACENTAS WITH CLINICAL INDICATION OF IUGR AND PET	• Discussion of criteria of FGR as clinical and pathological diagnosis, clinical symptoms of IUGR and uteroplacental under perfusion- obstetric terms frequently used on clinical request forms - the placenta in PET and HELLP syndrome • Placental lesions frequently associated with FGR/PET (small weight, thin parenchyma, infarcts, massive perivillous fibrin) • Significance of location, parenchymal involvement, and gestational age.

PLACENTAS WITH CLINICAL INDICATION OF MATERNAL PYREXIA	• Routes of infections, possible pathogens, consequence of intrauterine infections, maternal and fetal response. • Importance of sampling as chorioamnionitis
PLACENTAS WITH CLINICAL INDICATION SPONTANEOUS MISCARRIAGE, SECOND TRIMESTER IUD/ ABORTION AND PRETERM DELIVERY.	• Review possible causes and correlate with significant placenta pathology • Preterm separation of placenta retroplacental bleeding, abruption, diffuse chorioamnionic haemosiderosis. • In case of suspected chorioamnionitis, distinguish incomplete membrane, thickened membrane, types of discolouration, and recognise associated marginal abruption. • Discuss limits of examination in macerated IUD, separate post-mortem artefact from genuine pathology.
PLACENTAS WITH CLINICAL INDICATION OF STILLBIRTH, OR SEVERE FETAL DISTRESS	• Summarise all the clinically significant placental lesions discussed previously. • Point out that even if the exact cause of stillbirth cannot be determined based on placental pathology it nearly always provides insight with revealing relevant condition concerning fetal death.
PLACENTAS OF MULTIPLE PREGNANCY	• Placentas of multiple pregnancy: separate and “fused” discs of twin placentas • Understanding difference between monoamniotic, monochorionic, and dichorionic twin placentas. • How to assess sharing of fused disc, how to determine chorionicity based on membrane examination. • Complications of twinning, in particular monochorionic twinning. • Performing and evaluating results of injection studies to assess monochorionic diamniotic twin placentas with or without evidence of twin-to-twin transfusion syndrome.

PLACENTAL MICROSCOPY REPORTING

- Normal histology of placenta – first, second and third trimester placentas
- Normal histology of umbilical cord – single umbilical artery, embryonic remnants and squamous metaplasia.
- Abnormal placentation: blighted ovum, placenta accreta spectrum and placenta previa etc.

Infectious pathology:

- Chorioamnionitis – types, staging and grading
- Umbilical vasculitis and funisitis – staging and grading
- Villitis – acute and chronic (viral infections)
- Intervillositis – acute and chronic histiocytic

Non-infectious pathology:

- Chorangiomas/chorangiosis
- Chronic deciduitis
- Distal villous hypoplasia (DVH)
- Delayed villous maturation (DVM) – maternal diabetes and overgrowth syndromes (BWS)
- Eosinophilic/T cell chorionic vasculitis
- Fetal vascular malperfusion (FVM)
- Haemorrhagic endovasculitis/vasculopathy
- Maternal vascular malperfusion (MVM)
- Massive perivillous fibrin deposition/maternal floor infarction
- Meconium staining/necrosis
- Retroplacental haemorrhage with intraplacental extension (placental abruption)
- Accelerated maturation of villi
- Villitis of unknown (a)etiology (VUE)
- Subchorionic haemorrhage
- Intervillous thrombosis/fetomaternal haemorrhage

Placental findings in specific conditions:

- SGA/IUGR (small baby-small placenta)
- Recurrent miscarriage – SLE, coagulopathy
- Intrauterine fetal demise

- Placental oedema (placental hydrops)
- Pre-eclampsia
- Twin-twin transfusion
- Placental mesenchymal dysplasia
- Gestational trophoblastic disease
- Neoplasms and metastases

Workplace-Based Assessments (WBA – Minimum of 18 in total, all directed)

Directly Observed Practical Skills (DOPS) (at least six from the following):

Set up and use microscope

Cut-up:

- completion of a simple cut up session
- macroscopic description and block taking from a pinned or orientated specimen

Microscopy:

- demonstrate ability to recognise normal histology
- demonstrate ability to recognise various placental pathologies

Evaluation of Clinical Events (ECEs) (at least six from the following):

Histology:

- present a case with ancillary investigations to a consultant trainer

Audit and Safety:

- present at audit meeting and lead discussion, having discussed findings with trainer beforehand
- involvement in a patient safety event (e.g. specimen misidentification)

Poster presentation:

- show a poster at the Pathological Society meeting or similar

Teaching event for or demonstration of interesting case to students / trainees:

- to be observed by trainer

Referral letter:

- write a draft letter on a case for referral

PMRT

- demonstration of participation at local perinatal mortality meetings.

Case-Based Discussions (CBDs) (at least six from the following):

Histology:

- present a case with ancillary investigations (e.g. additional levels, blocks or immunohistochemical or histochemical stains, review of previous samples) to a consultant trainer, indicating the relevance of the ancillary investigations
- write an appropriate report for a complex case or resection (with appropriate clinicopathological information)
- discussion of case involving divergent diagnostic opinion

Appendix B - Progress Report

Date:	
Name of candidate:	
Name of educational supervisor:	
Cases reported:	
Progress on dissection of cases:	
Work based assessments: (completed to date)	
Progress with educational case:	
Progress with audit:	
Educational supervisors report: (need supervisor report every 6 months)	
Training days/lectures attended:	
Any other comments:	

Trainee signature

Educational supervisor signature

Appendix C - Summary of Results from Multi-Source Feedback Exercise (Blank)

Multi-source Feedback Summary

Overall Questionnaire Means

Self-assessed mean: _____
Assessor mean: _____
Group mean: _____
Total number of assessors: _____

Assessors Grades

Consultant histopathologist: _____
SpR or StR trainee within specialty: _____
Scientific / Laboratory staff: _____
Clinical staff: _____

Concerns Raised

The number of assessors who raised concerns with this assessment: _____

Numeric question responses

Insert summary graph from spreadsheet

The following numeric scale is used for question answers and relates to the BMS training in the dissection and reporting of histopathology specimens:

1. This behaviour calls into question the BMS's fitness to practice in this domain
2. This behaviour raises significant concern
3. Borderline: This behaviour needs addressing for the BMS's participant's personal development
4. This behaviour is as you would expect for a competent, safe BMS
5. This BMS functions above the level expected in this area
6. This BMS functions at a level well above the level expected in this area

The graph represents the questions from the form:

Question	Self response	Assessors Mean	Group Mean
1. Ability to recognise normal histology and common pathological abnormalities			
2. Ability to solve clinical problems by applying knowledge of basic principles of pathology			
3. Understanding of the importance of surgical pathology to clinicians and patients			
4. Ability to orientate and describe macroscopic pathological specimens			
5. Ability to take appropriate blocks			
6. Ability to use a microscope			
7. Ability to work in the laboratory in a safe way, demonstrating understanding of health and safety issues			
8. Attention to detail and vigilance			
9. Awareness of their own limitations			
10. Ability to apply up-to-date/evidence-based medicine			
11. Ability to manage time effectively/prioritise			
12. Ability to deal with stress			
13. Self motivation and commitment to learning			
14. Willingness and effectiveness when teaching/ training colleagues or students or junior medics in their department			
15. Ability to accept feedback			
16. Ability to understand the impact of pathology diagnosis on coordinating patient care			
17. Respect for patients and their right to confidentiality			
18. Ability to explain pathological findings in relation to biopsy to clinical colleagues			
19. Provision of clear, accurate written reports for colleagues			
20. Respect for and ability to work well with colleagues (laboratory, mortuary, clinical and administration staff)			
21. Reliability			
22. Overall how do you rate this BMS in terms of their pathological understanding of disease process and their ability to correlate with the clinical picture?			

Text Question Responses

Question	Comments
Please describe the ability of the BMS to adapt to the new role of specimen dissection and histology reporting.	
Please describe the ability of the BMS to participate in their own teaching, training and assessing.	
Please describe the willingness of the BMS to participate in the teaching, training and assessing of others in the department	
Please describe the ability of the BMS to work with colleagues, both scientific and medical	
Do you have any concerns about this BMS's probity? If yes, please describe them here.	
Do you have any concerns about BMS's health in relation to their fitness to practice? If yes, please describe them here.	
Do you have any concerns that you have not recorded elsewhere? If yes, please describe them here	
Please describe any behaviour that should be a particular focus for development	
Please use this space for any other comments you have about this BMS.	

Appendix D – Work-Based Assessment Forms



WORKPLACE-BASED ASSESSMENT FORM
HISTOPATHOLOGY

Case-based discussion (CbD)

Trainee's name:		GMC N°:		Stage of training:	A	B	C	D
Assessor's name:		Please circle one	Consultant Clinical scientist	SAS Trainee	Senior BMS Other			

Brief outline of procedure, indicating focus for assessment (refer to topics in curriculum). Tick category of case or write in space below.

☐ Autopsy case – personally undertaken or observed autopsy protocol	☐ Reflective discussion on trainee's personal involvement in organisational or management issue	☐ Complex case requiring immunohistochemistry or other specialist technique	☐ Discussion of involvement in critical incident or patient safety event
☐ Discussion of case involving divergent diagnostic opinions	☐ Major resection specimens	☐ Reflective discussion on trainee's personal involvement in teaching event	Please specify:

Complexity of procedure:	☐ Low	☐ Average	☐ High
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Please ensure this patient is not identifiable

Please grade the following areas using the scale provided. This should relate to the standard expected for the end of the appropriate stage of training:

<u>Please ensure this patient is not identifiable</u>		Below expectations		Borderline	Meets expectations	Above expectations	Unable to comment
Please grade the following areas using the scale provided. This should relate to the standard expected for the end of the appropriate stage of training:		1	2	3	4	5	6
1	Pathological assessment of case						
2	Additional investigations (appropriateness, timeliness, cost effectiveness)						
3	Clinico-pathological correlation						
4	Advice to clinical users						
5	Record keeping, including reports, proformas, correspondence, coding						
6	Consideration of patient issues (e.g. respect for patient dignity, consent, confidentiality, turnaround times)						
7	Overall clinical judgement						
8	Overall professionalism						

PLEASE COMMENT TO SUPPORT YOUR SCORING:

SUGGESTED DEVELOPMENTAL WORK:
(particularly areas scoring 1–3)

Outcome:	Satisfactory (Please circle as appropriate)	Unsatisfactory	Date of assessment:		Time taken for assessment:	
Signature of assessor:		Signature of trainee:		Time taken for feedback:		



The Royal College of Pathologists

Pathology: the science behind the cure

**WORKPLACE-BASED ASSESSMENT FORM
HISTOPATHOLOGY**

**Direct observation of practical skills
(DOPS)**

Trainee's name:		GMC N°:		Stage of training: A B C D
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Assessor's name:		Please circle one	Consultant Clinical scientist	SAS Trainee	Senior BMS Other
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Brief outline of procedure , indicating focus for assessment (refer to topics in curriculum). Tick category of case or write in space below.	
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☐ Specimen cut up (state specimen or scenario)	☐ Autopsy procedures (state aspect)	☐ Set up and use of microscope	☐ Systematic assessment of biopsy/cytology case (state type)
☐ Reporting procedures	☐ Use of camera and specimen photography	☐ Taking a fine needle aspirate	☐ Handling and reporting of frozen section
☐ Observation of trainee led teaching event	☐ Please specify		

Complexity of procedure:	☐ Low	☐ Average	☐ High
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Please grade the following areas using the scale provided. This should relate to the standard expected for the end of the appropriate stage of training:		Below expectations		Borderline	Meets expectations	Above expectations	Unable to assess
		1	2	3	4	5	6
1	Understands principles of procedure						
2	Demonstrate appropriate preparation pre-procedure						
3	Ensures patient safety (identification checks, adheres to SOP etc.)						
4	Complies with health and safety requirements (e.g. assessment of risk, use of personal protective equipment, aseptic technique where appropriate)						
5	Technical ability and correct use of equipment						
6	Communication skills (written and/or verbal)						
7	Consideration of patient focus and professional issues (e.g. respect for patient dignity, consent, compliance with Human Tissue Act)						
8	Seeks help where appropriate						
9	Overall ability to perform procedure						

PLEASE COMMENT TO SUPPORT YOUR SCORING:

SUGGESTED DEVELOPMENTAL WORK: (particularly areas scoring 1–3)

Outcome:	Satisfactory	Unsatisfactory	Date of assessment:		Time taken for assessment:	
	(Please circle as appropriate)					

Signature of assessor:		Signature of trainee:		Time taken for feedback:	
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Trainee's name:		GMC N°:		Stage of training: A B C D
Assessor's name:		Please circle one	Consultant Clinical scientist	SAS Trainee
		Senior BMS Other		

Brief outline of procedure, indicating focus for assessment (refer to topics in curriculum). Tick category of case or write in space below.

☐ Histopathology/cytology case – assessment and reporting	☐ Use of critical incident reporting procedures	☐ Demonstration and presentation of case(s) in MDTM/CPC	☐ Presentation/case discussion at morbidity/mortality meeting or "grand round"
☐ Presenting audit findings and leading discussion on the action required	☐ Making histo/cytopathological correlation and providing feedback	☐ Use of the call and recall system in cervical cytology screening	☐ Autopsy case – assessment and demonstration of autopsy findings to supervisor or clinical team
☐ Handling a patient safety event (e.g. specimen misidentification)	☐ Providing clinico-pathological advice in response to an enquiry	☐ Referring a case for specialist opinion	☐ Please specify:

Complexity of procedure: ☐ Low ☐ Average ☐ High

Please ensure this patient is not identifiable		Please grade the following areas using the scale provided. This should relate to the standard expected for the end of the appropriate stage of training:					
		Below expectations	Borderline	Meets expectations	Above expectations	Unable to comment	
		1	2	3	4	5	6
1	Understands theory of encounter/event (process)						
2	Applies clinical/pathological knowledge appropriately						
3	Makes appropriate clinical judgments						
4	Follows established procedure (SOP, Trust procedure or guidelines)						
5	Demonstrates appropriate communication skills (verbal and written)						
6	Maintains a patient focus and delivers patient centered care (e.g. respect for patient dignity, consent, confidentiality, turnaround times)						
7	Maintains professional standards						
8	Considers professional issues (record keeping, consultation with colleagues, linkage of department to others, Trust rules, plan for feedback)						
9	Organisation and efficiency						
10	Overall clinical care (where appropriate)						

PLEASE COMMENT TO SUPPORT YOUR SCORING:

SUGGESTED DEVELOPMENTAL WORK:
(particularly areas scoring 1-3)

Outcome:	Satisfactory	Unsatisfactory	Date of assessment:		Time taken for assessment:	
(Please circle as appropriate)						
Signature of assessor:		Signature of trainee:		Time taken for feedback:		