

BASIC SPECIALIST TRAINING IN

HISTOPATHOLOGY

Outcomes Based Education - OBE Curriculum



This Curriculum of Basic Specialist Training in Histopathology was developed in 2019 through a systematic review. The curriculum undergoes an annual review process by the National Specialty Director and the RCPI Education Department. The curriculum is approved by Dr Niall Swan, National Specialty Director, the Histopathology Specialty Training Committee and the Faculty of Pathology.

| Version | Date Published | Last Edited By | Version Comments |
|---------|----------------|------------------|---|
| 4.0 | 01 July 2024 | Keith Farrington | Mandatory Teaching Review related edits: Taught Programme |

Table of Contents

| Introduction | 4 |
|---|----|
| Overview of Curriculum | 5 |
| Training Goals | 6 |
| Outcomes | |
| Details of assessment | 7 |
| Core Professional Skills | 8 |
| Outcomes Overview: Core Professional Skills | 9 |
| Partnership | 10 |
| Goal: Communication and interpersonal skills | 10 |
| Goal: Collaboration | 10 |
| Goal: Health Promotion | 11 |
| Goal: Caring for patients | 11 |
| Practice | 12 |
| Goal: Patient safety and ethical practice | 12 |
| Goal: Organisational behaviour and leadership | 12 |
| Goal: Wellbeing | 13 |
| Performance | 14 |
| Goal: Continuing competence and lifelong learning | 14 |
| Goal: Reflective practice and self-awareness | 14 |
| Goal: Quality Assurance and Improvement | 15 |
| General Histopathology Skills | 16 |
| Outcomes Overview: General Laboratory Activities | 17 |
| Outcomes Overview: Macroscopic Examination | 18 |
| Outcomes Overview: Microscopic Examination | 19 |
| Outcomes Overview: Report Writing | 20 |
| General Laboratory Activities | |
| Goal: Surgical Pathology | 21 |
| Goal: Molecular Pathology | 23 |

| Goal: Cytopathology | 24 |
|---|----|
| Goal: Autopsy | 25 |
| Macroscopic Examination | 26 |
| Goal: Specimen Handling | 26 |
| Goal: Autopsy Examination | 27 |
| Microscopic Examination | 29 |
| Goal: Reporting of surgical and biopsy specimens (supervised) | 29 |
| Report Writing | 32 |
| Goal: Preparation of Surgical Pathology Reports | 32 |
| Goal: Preparation of Autopsy Reports | 33 |
| Concurrent Training Activities | 34 |
| Outcomes Overview: Concurrent Training Activities | 35 |
| Concurrent Training Activities | 36 |
| Goal: Educational Activities | 36 |
| BST Histopathology Taught Programme | 36 |
| Goal: Collaborative Activities | 39 |

Introduction

This curriculum outlines the Royal College of Physicians of Ireland's (RCPI) approach to accreditation and certification of Basic Specialist Training (BST) in Histopathology.

Completion of BST is an essential step for entry into Higher Specialist Training. This curriculum is aimed at Senior House Officers (SHOs) in training and their supervising Trainers. It outlines the knowledge, skills and attitudes that should be developed during the period of BST.

Key elements of BST

- Clinical experience gained from direct Histopathology work, supervised by senior clinicians and based on a clinical curriculum.
- Professionalism and ethical practice learnt through mentorship by senior clinicians, integrated into the curriculum requirements and supported by RCPI's education programmes.

The core curriculum has been developed to ensure that these key elements are completed to the satisfaction of the Faculty of Pathology. Accreditation and certification will focus on evaluation of Trainees' progress and the educational validity of the posts they occupy. This will be done by formal registration of all Trainees with RCPI and an ePortfolio to ensure that specific goals and outcomes are achieved and that formal supervision by Trainers is undertaken during each post.

Dr Niall Swan National Specialty Director, BST Histopathology

Overview of Curriculum

This curriculum outlines the educational content and expected achievements of the two-year Basic Specialist Training (BST) Programme. Key training policies, training goals, standards of professionalism and specific outcomes are detailed.

Trainees will be assessed in the workplace at intervals throughout the BST programme. These assessments must be recorded in the BST online ePortfolio. Trainees are also required to attend an annual review in RCPI, at which their ePortfolio is reviewed and they are given the opportunity to provide feedback on their rotation. The ePortfolio should be kept up to date throughout the year.



The curriculum for BST outlines the core knowledge, skills and achievements that are required by the end of the BST Programme to achieve a BST certificate. There will be opportunities within the programme for Trainees to acquire additional knowledge and skills over and above the core content and trainees are encouraged to actively seek additional opportunities to learn.

Basic Specialist Training: Requirements and Policies

BST consists of two years of training in approved Senior House Officer posts. Senior House Officer (SHO) grade is the initial training grade after Internship, and for most doctors the minimum period spent in this grade will be two years.

BST in Histopathology is regulated and certified by the Faculty of Pathology and RCPI and completion of this period of training is a mandatory requirement for entry into Higher Specialist Training Programmes (Specialist Registrar training) in Histopathology.

BST must be done in posts that have been approved for training by RCPI.

Trainees can access RCPI policies and procedures through the online trainee handbook.

Training Goals

Throughout the training programme the Trainee is working towards continual progression in training goals. Clinical and professional experience is recorded under these headings. For each post, the Trainee and Trainer will meet to complete an end of post assessment and evaluate progress for each goal. The Trainer will determine if the trainees progress meets expectation for that point in training.

Experience will be gained in different rotations and through dedicated teaching activities. In every post a Trainee is expected to develop their skills against goals and record outcomes appropriately. Assessments of these skills incorporate core professional skills.

Partnership

- Communication and interpersonal skills
- Collaboration
- o Health Promotion
- Caring for the patient

Practice

- o Patient safety and ethical practice
- Organisational behaviour and leadership
- Wellbeing

Performance

- o Continuing competence and lifelong learning
- Reflective practice and self-awareness
- o Quality assurance and improvement
- General Laboratory Activities
- Macroscopic Examination
- Microscopic Examination
- Report Writing
- Concurrent Training Activities

Outcomes

Specific outcomes are defined under each goal. By the end of BST, a Trainee should demonstrate an ability to meet that outcome. Evidence of experiences, expected case experiences and details of knowledge required are outlined.

Details of assessment

A record of experience is kept for each outcome.

Outcomes that are recorded formatively

Skills that are expected to develop over time. During an assessment a trainee is evaluated against the expected standard for their level of experience. An observed skill may be recorded as a formative assessment once specific feedback has been given and areas for improvement identified. Once an outcome has been successfully attained a Trainee is not required to record formative assessments unless the trainer identifies a need to repeat the assessment or a significant amount of time has lapsed since the trainee successfully completed the outcome.

Records of case experience

Examples of cases that are reflective of clinical experience gained are required to be recorded in ePortfolio. For some outcomes a mix of cases may be required to demonstrate a variety of experience.

Workplace Interactions

Some outcomes are recorded in ePortfolio as self-assessments that are then discussed with a senior staff member (Trainer, another consultant or SpR.) The trainee should review the expected knowledge and complete the self-assessment when they are confident they could answer questions on the knowledge points covered.

Other outcomes will be assessed through informal observations informal discussions, case based discussion or formal observation by a trainer who has delivered appropriate feedback to the trainee.

Sign off and Trainer verification

When an assessment of an outcome is successfully signed off it is eligible to count towards progress against training goals. The assigned trainer will determine if the submitted records of experience are acceptable. The trainer may wish to discuss the records in more detail with the trainee and the trainee should be prepared to discuss any self-assessments submitted or observations. Sign off for training goals is cumulative and dependent of feedback from a number of sources throughout the duration of training.

Core Professional Skills

Goals, Outcomes and Assessment Details

Outcomes Overview: Core Professional Skills

Completion of Outcome

| Core Professional Skills | | | | | | | | |
|--------------------------|--|--|--|--|--|--|--|--|
| Partnership | Quarterly Assessment/End of Post/End of Year | | | | | | | |
| Practice | Evaluation | | | | | | | |
| Performance | | | | | | | | |

Partnership

"Good care depends on doctors working together with patients and colleagues towards shared aims and with mutual respect. Partnership relies on trust . . . , patient-centred care . . , working together . . . , good communication . . . and advocacy"

Chapter 2, P10

https://issuu.com/mcirl/docs/guide_to_professional_conduct_and_e?e=12642421/35694606

The training goals for partnership are:

- Communication and interpersonal skills
- Collaboration
- Health Promotion
- Caring for the patient

Goal: Communication and interpersonal skills

Facilitate the exchange of information, be considerate of the interpersonal and group dynamics, have a respectful and honest approach.

- Engage with patients and colleagues in a respectful manner
- Actively listen to the thoughts, concerns and opinions of others
- Maintain good working relationships with colleagues

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Gather and present an accurate and focused history from the patient and/or other sources as appropriate
- 2. Effectively communicate information to clinical staff
- 3. Effectively communicate information to patients and families
- 4. Engage in open disclosure
- 5. Provide an appropriate patient handover in line with local and national handover
- 6. Discuss the training and workplace policies for complaints and bullying policy

Goal: Collaboration

Collaborate with patients, their families and your colleagues to work in the best interest of the patient, for improved services and to create a positive working environment.

- Work cooperatively with colleagues and team members to deliver an excellent standard of care
- Seek to build trust and mutual respect with patients
- Freely share knowledge and information
- Take on-board available, relevant feedback

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Work as part of a team
- 2. Cooperatively solve problems with colleagues and patients
- 3. Maintain clear clinical records
- 4. Perform WHO safe surgery guidelines in the workplace

Goal: Health Promotion

Communicate and facilitate discussion around the effect of lifestyle factors on health and promote the ethical practice of evidence based medicine.

- Seek up to date evidence on lifestyle factors that:
 - o negatively impact health outcomes
 - o increase risk of illness
 - o positively impact health and decrease risk factors
- Actively promote good health practices with patients individually and collectively

Goal: Caring for patients

Take into consideration patient's individuality, personal preferences, goals and the need to provide compassionate and dignified care.

- Be familiar with
 - o Ethical guidelines
 - Local and national clinical care guidelines
- Act in the patients best interest
- Engage in shared decision making and discuss consent

Practice

"...behaviour and values that support good care. [Practice] relies on putting the interests and well-being of patients first. The main elements of good practice are: caring when treating patients . . . , confidentiality . . . , promoting patient safety . . . , integrity . . . , self-care . . . , practice management . . . , use of resources . . . , and conflicts of interest"

Chapter 2, P11

https://issuu.com/mcirl/docs/guide_to_professional_conduct_and_e?e=12642421/35694606

The training goals for practice are:

- Patient safety and ethical practice
- Organisational behaviour and leadership
- Wellbeing

Goal: Patient safety and ethical practice

Put the interest of the patient first in decisions and actions.

- React in a timely manner to issues identified that may negatively impact the patient's outcome
- Follow safe working practices that impact patient's safety
- Understand ethical practice and the medical council guidelines
- Support a culture of open disclosure and risk reporting

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Practice aseptic techniques and hand hygiene if appropriate
- 2. Encourage others to observe infection control principles and laboratory health and safety principles
- 3. Actively participate in and understand incident reporting

Goal: Organisational behaviour and leadership

The activities, personnel and resources that impact the functioning of the team, hospital and health care system.

- Understand and work within management systems
- Know the impacts of resources and necessary management
- Demonstrate proficient self-management

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Plan schedule and arrive on time
- 2. Respond to colleagues in a timely manner
- 3. Manage time appropriately in the clinical setting
- 4. Set appropriate personal goals
- 5. Communicate leave and off duty appropriately with all members of team

Goal: Wellbeing

Be responsible for own well-being and health and its potential impact on the provision of clinical care and patient outcomes.

- Be aware of signs of poor health and well-being
- Be cognisant of the risk to patient safety related to poor health and well-being of self and colleagues
- Manage and sustain your own physical and mental well-being

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Recognise potential stressors
- 2. Effectively deploy stress reduction strategies and wellness improvement
- 3. Effectively manage your physical and mental health e.g. have own GP
- 4. Direct patients and colleagues to appropriate mental health support
- 5. Recognise undermining and unsupportive behaviour and take the appropriate course of action

Performance

"...describes the behaviours and processes that provide the foundation for good care.

[Performance] requires . . . competence . . ., reflective practice . . ., acting as a role model . . . , teaching and training medical students and doctors new to practice"

Chapter 2, P12

https://issuu.com/mcirl/docs/guide_to_professional_conduct_and_e?e=12642421/35694606

The training goals for performance are:

- Continuing competence and lifelong learning
- Reflective practice and self-awareness
- Quality assurance and improvement

Goal: Continuing competence and lifelong learning

Continually seek to learn, to improve clinical skills and to understand established and emerging theories in the practice of medicine.

- Meet career requirements including those of the medical council, your employer and your training body
- Be able to identify and optimise teaching opportunities in the workplace and other professional environments
- Develop and deliver teaching using appropriate methods for the environment and target audience

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Teach junior healthcare professionals
- 2. Engage in peer to peer teaching
- 3. Deliver a presentation
- 4. Seek opportunities to learn
- 5. Engage in self-directed learning
- 6. Maintain a record of professional achievements

Goal: Reflective practice and self-awareness

Bring awareness to your actions and decisions and engage in critical appraisal of own work to drive lifelong learning and improve practice.

- Pay critical attention to the practical values and theories which inform every day practice
- Be aware of your own level of practice and learning needs
- Evaluate and appraise your decisions and actions with consideration as to what you would change in the future

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Identify gaps in own knowledge
- 2. Work within their own ability and call for help when appropriate

Goal: Quality Assurance and Improvement

Seek opportunities to promote excellence and improvements in clinical care through the audit of practice, active engagement in and the application of clinical research and the dissemination of knowledge at all levels and across teams.

- Gain knowledge of quality improvement methodology
- Follow best practice in patient safety
- Conduct ethical and reproducible research

Outcomes

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Engage with audit and quality improvement projects
- 2. Critically evaluate a research paper
- 3. Contribute research evidence to a group discussion
- 4. Understand the core concepts of data protection

General Histopathology Skills

Goals, Outcomes and Assessment Details

Outcomes Overview: General Laboratory Activities

| | Form Names Form Names Great Replace Control of the Control of th | | | | | | | | |
|---|--|----------------|----|----------------------------|-------------|---------------|--------|----------|-----------------------|
| | | Set Asserience | | cytuctures Vorkplace II | Internation | Lomally is | Orsuce | On Addit | wed Recording Trainer |
| General Laboratory Activities | | | | | | | | | |
| Goal: Surgical Pathology | ı | | 1 | 1 | | | 1 | | 1 , |
| Describe specimen handling | | | Υ | | | | | | ✓ |
| Describe tissue processing & sectioning | | | Υ | | | | | | ✓ |
| Describe histochemical & immunohistochemical staining | | | Υ | | | | | | ✓ |
| Describe set up & ergonomics of microscope | | | Υ | | | | | | ✓ |
| Goal: Molecular Pathology | | · | | | | | | | |
| Describe specimen handling | | | Υ | | | | | | ✓ |
| Demonstrate knowledge of molecular pathology | | | | | | | | | |
| techniques | Pg | | Pg | | | | | ✓ | ✓ |
| Discuss fundamentals of molecular biology | | Pg | Pg | | | | | | |
| Goal: Cytology/Cytopathology | | | | | | | | | |
| Describe specimen handling | Pg | | Pg | | | | | ✓ | ✓ |
| Goal: Autopsy | | | | | | | • | | |
| Describe the difference between coronial and house | | | | | | | | | |
| cases and the pathologists role in each | | | Pg | | Pg | | | | ✓ |
| Describe specimen handling, health & safety, and, organ | | | | | | | | | |
| retention | | | Pg | | Pg | | | | ✓ |

- Q Per Quarter
- P Per Post
- Y Per year
- Pg Per Programme

Outcomes Overview: Macroscopic Examination

| | \(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}\)\(\frac{1}2\)\(\frac{1}\)\(\frac{1}\2\)\(\frac{1}\2\)\(\frac{1} | | | jis desider Structur | ed CBS Internal | Names Notice Ned | On Such | S John Red Or August | det Red diff |
|---|--|--------------|---|-------------------------|-----------------|---------------------|---------|----------------------|--------------|
| | Record of | f Experience | V | Vorkplace | Interaction | 15 | Compl | etion of O | utcome |
| Macroscopic Examination | | | | | | | | | |
| Goal: Specimen Dissection | | | | | | | | | |
| Demonstrate knowledge of departmental and/or | | | | | | | | | |
| international and national protocols for | | | | | | | | | |
| dissection of specimens | | | | | Р | | | | ✓ |
| | | | | | | | | | |
| Perform macroscopic examination of specimens | Q | | | Pg | P | Pg | ✓ | | ✓ |
| Goal: Autopsy Examination | | | | | | | | | |
| Perform an adult autopsy under supervision | Pg | | | Pg | | | ✓ | | |
| Dissect the internal organs as part of a post | | | | | | | | | |
| mortem examination | Pg | Pg | | Pg | | Pg | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| Sample tissues for microscopic examination and | | | | | | | | | |
| perform ancillary tests at autopsy (Microbiology, | | | | | | | | | |
| Toxicology, Chemical Analysis of Fluids) | Pg | Pg | | | | | | ✓ | ✓ |
| Discuss Organ retention decisions | Pg | | | | Pg | | | ✓ | ✓ |

- Q Per Quarter
- P Per Post
- Y Per year
- Pg Per Programme

Outcomes Overview: Microscopic Examination

| | QSE QU | | nert litordi | discussion Structure | ed CBD Internal | Names Names | Or Sector | ST Jakes | ded Recolated |
|---|-------------|------------|--------------|-------------------------|-----------------|----------------|------------|------------|---------------|
| | Record of | Experience | V | Vorkplace | Interaction | ns | Compl | etion of O | utcome |
| Microscopic Examination | | | | | | | | | |
| Goal: Reporting of surgical and biopsy specimen | s (supervis | ed) | | | | | | | |
| Perform Microscopic Examination of Surgical | Q | | | γ* | р | Y* | √ ∗ | | · |
| Pathology Specimens | ų | | | Υ. | P | Υ. | * | _ * | _ * |
| Perform Microscopic Examination of | | | | | | | | | |
| histochemical Immunohistochemically stained | Q | | | Pg* | P | Pg* | √ ∗ | ✓ | ✓ |
| Surgical Pathology Specimens | | | | | | | | | |
| Perform Microscopic Examination of | Q | | | Pg* | P | Pg* | √ ∗ | ✓ | ✓ |
| Cytopathology Specimens | ď | | | -8 | r | r g | | | |
| Perform Microscopic examination of Autopsy | Pg | | | Pg | | Pg | ✓ | / | · |
| specimens | ГB | | | rg | | rg | Ť | | |
| Observe Molecular Pathology Techniques | Р | Pg | | | | | | ✓ | ✓ |
| Recognise indications for ancillary tests of | | | | | | | | | |
| specimens to include chemical stains | Pg | Pg | | Pg | Pg | | ✓ | ✓ | ✓ |
| immunohistochemistry, molecular pathology | | | | | | | | | |

Q Per Quarter *Outcome Activity must be signed off by Trainees own Trainer

P Per Post

Y Per year

Pg Per Programme

Outcomes Overview: Report Writing

| | Jog Land | jene setuses | likara i | seusia seutud | | Names Observed Formalive | Berteld OF State | S. S. L. A. A. C. A. A. A. C. C. A. A. C. C. C. A. C. | ned Recording | Region |
|---|-----------|--------------|----------|---------------|-------------|--------------------------------|------------------|---|---------------|--------|
| | Record of | Experience | ٧ | Vorkplace | Interaction | | | Sign Off | | |
| Report Writing | | | | | | | | | | |
| Goal: Preparation of Surgical Pathology Reports | | | | | | | | | | |
| Formulate Histopathology and Cytopathology | 0 | | | Da | Р | | ./ | 1 | ./ | |
| reports | Q | | | Pg | <u> </u> | | | | | |
| Verbally communicate and discuss reports (under | | Р | | | | | | | ./ | |
| supervision) | | P | | | | | | | ' | |
| Goal: Preparation of Autopsy Reports | - | | | | | | | | | |
| Formulate a post mortem report including cause | | | | D- | D- | | , | , | , | |
| of death and clinoco-pathologic correlation | Pg | | | Pg | Pg | | V | ✓ | √ | |

- Q Per Quarter
- P Per Post
- Y Per year
- Pg Per Programme

General Laboratory Activities

The training goals for General Laboratory Activities are:

- Surgical Pathology
- Molecular Pathology
- Cytopathology
- Autopsy

Goal: Surgical Pathology

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Describe specimen handling
- 2. Describe tissue processing and sectioning
- 3. Describe histochemical and immunohistochemical staining
- 4. Describe the set up and ergonomics of the microscope

Describe specimen handling (Surgical Pathology)

Record of experience: No formal recording.

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing procedures for handling specimens with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback.

Sign off: Signed off yearly during training upon Trainer verification of informal discussion.

Focus of Feedback – Knowledge of practical task(s)

The Trainee should be able to:

- Describe the procedure(s)
- Be aware of standard operating procedures (where applicable)
- Follow the necessary laboratory guidelines
- Abide by health and safety regulations

Describe tissue processing and sectioning

Record of experience: No formal recording.

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing procedures for tissue processing and sectioning with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback.

Sign off: Signed off yearly during training upon Trainer verification of informal discussion.

Focus of Feedback – Knowledge of practical task(s)

The Trainee should be able to:

- Describe tissue sectioning
- Be aware of standard operating procedures (where appropriate)
- Abides by health and safety regulations

Describe histochemical and immunohistochemical staining

Record of experience: No formal recording.

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing procedure for histochemical and immunohistochemical staining with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback.

Sign off: Signed off yearly during training upon Trainer verification of informal discussion.

Focus of Feedback – knowledge of practical task(s)

The Trainee should be able to:

- Describe histochemical and immunohistochemical staining to an appropriate standard on a range of sample types
- Be aware of standard operating procedures (where appropriate)
- · Abide by health and safety regulations

Set up and ergonomics of the microscope

Record of experience: No formal recording.

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing microscope set-up and ergonomics with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback.

Sign off: Signed off yearly during training upon Trainer verification of informal discussion.

Focus of Feedback – Microscope set up

The Trainee should be able to:

- Describe and demonstrate microscope set up
- Describe appropriate ergonomics of microscope work
- Liaise with occupational health (where necessary)

Goal: Molecular Pathology

By the end of BST, the trainee will demonstrate an ability to:

- 1. Describe specimen handling
- 2. Demonstrate knowledge of molecular pathology techniques
- 3. Discuss the fundamentals of molecular pathology

Describe specimen handling (Molecular Pathology)

Record of experience: No formal recording

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing procedures for handling specimens for molecular pathology with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback. Sign off: Signed off yearly during training upon Trainer verification of informal discussion.

Focus of Feedback – Knowledge of specimen handling

The Trainee should be able to:

- Describe the procedure(s)
- Be aware of standard operating procedures (where applicable)
- Follow the necessary laboratory guidelines
- Abide by health and safety regulations

Demonstrate knowledge of molecular pathology techniques

Record of experience: Examples of cases are to be recorded *e.g.* PCR, FISH, NGS Workplace interactions: Trainees should be able to discuss the use of molecular pathology techniques with senior staff members who provide feedback on performance. Progress is discussed with Trainer during end of post assessment.

Sign off: On recording of cases and Trainer verification of informal discussion.

Focus of Feedback – Progression of knowledge of molecular techniques The Trainee should be able to:

- Describe and discuss the basic concepts of molecular pathology techniques
- Choose an appropriate molecular assay
- Describe techniques and instrumentation relevant to molecular pathology

Discuss fundamentals of molecular pathology

Record of experience: No formal recording

Workplace interactions: Informally observed in the workplace by a senior staff member who provide recorded feedback on knowledge. Trainee self-assesses on knowledge of molecular pathology. Progress is discussed with a trainer during end of post assessment.

Sign off: Trainer verification of informal discussion and self-assessment.

Focus of Feedback – Knowledge of molecular biology

The Trainee should be able to

 Describe a knowledge of molecular pathology appropriate to his/her level of training and demonstrate an understanding of the role of molecular pathology in histopathology.

Goal: Cytopathology

By the end of BST, the Trainee will demonstrate an ability to:

1. Describe specimen handling

Describe specimen handling (Cytopathology)

Record of experience: No formal case recording

Workplace interactions: Assessment of this outcome is by the Trainee informally discussing procedures for handling specimens for cytopathology with a registered trainer or other nominated person (consultant or SpR) who will provide real time feedback.

Sign off: On recording of self-reflection Trainer verification of informal discussion.

Focus of Feedback – Knowledge of specimen handling for cytopathology The Trainee should be able to:

- Describe the procedure(s)
- Be aware of standard operating procedures (where applicable)
- Follow the necessary laboratory guidelines
- o Abide by health and safety regulations

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Describe the difference between coronial and house cases and the pathologist's role in each type
- 2. Describe specimen handling, health and safety, and organ retention

Describe the difference between coronial and house cases and the pathologist's role in each type

Record of experience: No formal case recording

Workplace interactions: Trainees should be able to distinguish between the requirements for the Pathologists role in house cases and in coroners cases and have an appropriate informal discussion with senior staff members who provide feedback. Trainees should also be informally observed by senior staff members in such cases. Progress is discussed with Trainer during end of post assessment.

Sign off: On Trainer approved recording of informal discussion and informal observation by senior staff member.

Focus of Feedback – Pathologists role in house case and coroners case The Trainee should be able to

Distinguish between Pathologists role in house case and coroners case

Describe specimen handling, health and safety, and organ retention

Record of experience: No formal case recording

Workplace interactions: Trainees should be able to have an appropriate informal discussion with senior staff members who provide feedback. Trainees should also be informally observed by senior staff members in such cases. Progress is discussed with Trainer during end of post assessment.

Sign off: On Trainer approved recording of informal discussion and informal observation by senior staff member.

Focus of Feedback – Knowledge of autopsy specimen handling and organ retention decisions.

The Trainee should be able to:

• Describe the procedures for organ retention and handling of specimens

Macroscopic Examination

The training goals for macroscopic examination are:

- Specimen Dissection
- Autopsy Examination

Goal: Specimen Handling

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Demonstrate knowledge of departmental and/or international and national protocols for dissection of specimens
- 2. Perform macroscopic examination of specimens

Demonstrate knowledge of departmental and/or international and national protocols for dissection of specimens

Record of experience: No formal case recording.

Workplace interactions: Informally observed in the workplace by a senior team member and

Trainee should be capable of discussing such protocols.

Sign off: On Trainer approved verification of informal discussion.

Focus of Feedback – Knowledge of departmental and/or international and national protocols

The Trainee should be able to:

- Follow all procedures
- Observe all health and safety requirements
- Comply with Standard Operating Procedures
- Communicate effectively with hospital staff where necessary

Perform macroscopic examination of specimens

Record of experience: Recording case examples

Workplace interactions: Informally observed in the workplace by a senior team member with feedback provided. The trainee is expected to undergo formal case based discussion and Directly Observed Procedure on specimen dissection, macroscopic description block selection and macroscopic examination macroscopic examination of specimens.

Sign off: On approved recording of cases and successful appraisal

Focus of Feedback – Skills in macroscopic examination During appraisal the trainee should be able to:

- Demonstrate macroscopic examination of specimens
- Perform specimen dissection, macroscopic description and block selection
- Discuss macroscopic examination formally with Trainer (or equivalent)

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Perform an adult autopsy under supervision
- 2. Dissect the internal organs as part of post mortem examination
- 3. Sample tissues for microscopic examination and perform ancillary tests at autopsy (Microbiology, Toxicology, Chemical Analysis of Fluids)
- 4. Discuss organ retention decisions

Perform an adult autopsy under supervision

Record of experience: Recording of examples of cases

Workplace interactions: Trainee should be able to undergo a structured case based discussion in the workplace with feedback provided and case selected for discussion with trainer/assessor

Sign off: On recording of case example(s) and Trainer verification of structured CBD

Focus of Feedback – Perform adult autopsy

The Trainee should be able to:

- Correctly perform the autopsy (under supervision)
- Follow all guidelines and procedures

Dissect the internal organs as part of a post mortem examination

Record of experience: Record cases per programme and self-assessment per programme Workplace interactions: Trainee to undergo a structured case based discussion in the workplace with feedback provided and case selected for discussion with trainer/assessor. Trainee to undergo formal observation (DOPS)

Sign off: On approved recording and successful appraisal

Focus of Feedback – Technical competence in dissection of internal organs The Trainee should be able to:

• Dissect internal organs at *post mortem* examination

Sample tissues for microscopic examination and perform ancillary tests at autopsy (Microbiology, Toxicology, Chemical Analysis of Fluids)

Record of experience: Record case examples per programme, Self-Assessment of proficiency Workplace interactions: progression of skills

Sign off: On recording of case example and Trainer verified self-assessment

Focus of Feedback – Perform sampling of tissues and performance of ancillary tests The Trainee should be able to proficiently sample tissues and recognise the need for and perform ancillary tests

Discuss organ retention decisions

Record of experience: Recording case experience

Workplace interactions: Informally observed in the workplace with feedback provided

Sign off: On recording of case(s) and Trainer verification of informal discussion

Focus of Feedback – Knowledge of organ retention decisions The Trainee should be able to:

• Discuss decisions regarding organ retention

Microscopic Examination

The training goals for Microscopic Examination are:

Goal: Reporting of surgical and biopsy specimens (supervised)

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Perform microscopic examination of surgical pathology specimens*
- 2. Perform microscopic examination on immunohistochemically stained surgical pathology specimens*
- 3. Perform microscopic examination of cytopathology specimens*
- 4. Perform microscopic examination of autopsy specimens
- 5. Observe Molecular Pathology techniques
- 6. Recognise indications for ancillary tests of specimens to include chemical stains, immunohistochemistry, molecular pathology

Perform microscopic examination of surgical pathology specimens

Record of experience: Recording case examples of surgical pathology examinations required per quarter.

Workplace interactions: Informal and formal observation (DOPS) of microscopic examination of surgical pathology samples along with formal discussion of case (CBD) with Trainer. Sign off: On recording of cases and successful appraisal of formal assessments.

Focus of Feedback – Examination of surgical pathology specimens

The Trainee should be able to:

- Prepare samples for microscopic analysis
- Following all necessary procedures
- Operation of the microscope
- Discuss and demonstrate process of arriving at correct pathology

Perform microscopic examination of histochemical and immunohistochemically stained surgical pathology specimens

Record of experience: Recording case examples of histochemical and immunohistochemically surgical pathology examinations required per quarter.

Workplace interactions: Informal and formal observation (DOPS) of microscopic examination of stained surgical pathology samples along with formal discussion of case (CBD) with Trainer.

Sign off: On recording of cases and successful appraisal.

^{*}Require sign off with Trainees own Trainer

Focus of Feedback – Proficiency in examination of stained surgical pathology specimens The Trainee should be able to:

- Prepare samples for microscopic analysis
- Following all necessary procedures
- Operation of the microscope
- Discuss and demonstrate process of arriving at correct pathology

Perform microscopic examination of cytopathology specimens

Record of experience: Recording case examples of cytopathology examinations required per quarter.

Workplace interactions: Informal and formal observation (DOPS) of microscopic examination of cytopathology samples along with formal discussion of case (CBD) with Trainer.

Sign off: On recording of cases and successful appraisal.

Focus of Feedback – Proficiency in examination of cytopathology specimens The Trainee should be able to:

- Prepare samples for microscopic analysis
- Following all necessary procedures
- Operation of the microscope
- Discuss and demonstrate process of arriving at correct pathology

Perform microscopic examination of autopsy specimens

Record of experience: Recording case example(s) per programme

Workplace interactions: Formal observation of microscopic examination of an autopsy

specimen and structured case based discussion.

Sign off: On successful appraisal and recording of cases.

Focus of Feedback – Microscopic Examination of Autopsy specimens The Trainee should be able to:

 Discuss and demonstrate the process of arriving at the correct pathology appropriate to their level of training

Observe molecular pathology techniques

Record of experience: Record of examples of case(s) observed per programme and self-assessment of knowledge of place of molecular pathology in Histopathology.

Workplace interactions: Progression of knowledge.

Sign off: On recording of case(s) and trainer verification of self-assessment.

Focus of Feedback – Knowledge of molecular pathology techniques The Trainee should be able to:

• Consider the role of molecular pathology in Histopathology

Recognise indications for requests for ancillary tests of specimens to include chemical stains, immunohistochemistry, molecular biology

Record of experience: A case mix reflective of experience is recorded Workplace interactions: The trainee should seek informal feedback in the workplace on the ability to choose and carry out appropriate investigations. Structured CBD Sign off: Evaluated at end of post with an expectation of progression from post to post

Focus of Feedback – Recognise indications for requests for ancillary tests of specimens The Trainee should be able to:

• Recognise indications for ancillary tests of specimens

Report Writing

The training goals for report Writing are:

- Preparation of Surgical Pathology Reports
- Preparation of Autopsy Reports

Goal: Preparation of Surgical Pathology Reports

By the end of BST, the Trainee will demonstrate an ability to:

- 1. Formulate Histopathology and Cytopathology reports
- 2. Verbally communicate and discuss reports (under supervision)

Formulate Histopathology Reports

Record of experience: Case recording of formulation of histopathology reports Workplace interactions: Informally observed in the workplace and the trainee should seek feedback on performance in terms of structured case based discussion. Sign off: On recording of case examples and undergoing structured CBD

Focus of Feedback – Formulate Histopathology reports (including macroscopic and microscopic elements)

The Trainer evaluates the Trainees ability to

Formulate Histopathology reports

Verbally communicate and discuss reports (under supervision)

Record of experience: Self-Assessment of proficiency in verbal communication and discussion of reports

Workplace interactions: Day to day work and communication with clinicians

Sign off: Trainer verification of self-assessment

Focus of Feedback -communication of reports

The Trainee should be able to

Verbally communicate and discuss written reports (under supervision)

Goal: Preparation of Autopsy Reports

By the end of BST, the Trainee will demonstrate an ability to:

1. Formulate a *post mortem* report including cause of death and clinico-pathologic correlation

Formulate a post mortem report including cause of death and clinic-pathologic correlation

Record of experience: Recording of case examples of formulating Histopathology reports Workplace interactions: Informal and formal observation of report writing in the workplace Sign off: Recording of cases and Trainer verification of informal discussion. Structured Case

Based Discussion

Focus of Feedback – Formulation of *post mortem* report The Trainee should be able to:

• Correlate cause of death with clinic-pathologic correlation

Concurrent Training Activities

Outcomes Overview: Concurrent Training Activities

| | | | and the state of Experience | Comple | Again of come | y venicater da kidar kidar kidar |
|---|----|----|---|----------|---------------|----------------------------------|
| Concurrent Training Activities | | | | | | |
| Goal: Educational Activities | | | | | | |
| Attend all mandatory courses | Pg | | | √ | √ | |
| BST Leadership in Clinical Practice (online) | | 1 | <u> </u> | ✓ | ✓ | |
| BST Leadership in Clinical Practice | | | | | | |
| (Leadership) | | 1 | Course Attendance | ✓ | ✓ | |
| Infection Control (Hospital Induction) | | 1 | | ✓ | ✓ | |
| Introductory to Laboratory Management | | | | | | |
| (Hospital) | | 1 | | ✓ | ✓ | |
| Thriving at BST | | 1 | | ✓ | ✓ | |
| Attend all required study days | Υ | 4 | Study Day Attendance | √ | √ | |
| | | | | | | |
| Goal: Collaborative Activities | | | | | | |
| Attend the required number of grand rounds | Pg | 10 | | ✓ | √ | |
| Attend the required number of MDT Meetings | Pg | 10 | | ✓ | ✓ | |
| Attend the mandated number of Journal Clubs | Pg | 10 | Collaborative | ✓ | ✓ | |
| Attend the Required Number of | ., | ١ | Activities | , | | |
| National/International Meetings | Υ | 1 | - | ✓ | ✓ | |
| Deliver Teaching | Υ | 1 | | ✓ | ✓ | |
| Perform Audit & QI Activities | Υ | 1 | | ✓ | ✓ | |
| Complete Personal Goals Form | Υ | 1 | Personal Goals Form | ✓ | ✓ | |
| Complete 18 month Aptitute Assessment | Pg | 1 | Offline | ✓ | ✓ | |
| Complete Quarterly Assessment//End of Post Assessments | Q | 1 | Quarterly Assessment/End of Post Assessment | √ | √ | |
| Complete End of Year Evaluation | Y | 1 | End of Year Evaluation | <u> </u> | · | |

Q Per Quarter

P Per Post

Y Per Year

Pg Per Programme

Concurrent Training Activities

The training goals for Concurrent Training Activities are:

- Educational Activities
- Collaborative Activities

It is a requirement to attend all courses, study days, grand rounds, MDT meetings, journal clubs and national/international meetings outlined in the curriculum.

Goal: Educational Activities

Outcomes

By the end of BST, the Trainee will have:

- 1. Attended all mandatory courses
- 2. Attended all required study days

BST Histopathology Taught Programme

Trainees are expected to attend all in-house and local teaching and training made available to them, trainees may miss some on site sessions due to scheduling, leave etc. Attendance at all virtual tutorials is required. At the end of post assessment the trainer will indicate if they are satisfied that they trainee has attended as much available teaching as possible.

Year One

Quarter 1: July - September

- Finding your place
 - Online Content
 - Core Professional Skills and Values in Communication
 - Principles of Person-Centered Care
 - Introduction to Quality Improvement
 - Introduction to Patient Safety
 - Virtual Tutorial
 - Introduction
 - · Teamwork, Prioritisation, and Time Management
 - Goal Setting
 - Personal and Professional Boundaries and Responsibilities

Quarter 2: October - December

- Ethics and Care
 - Online Content
 - Leaders and Managers in BST
 - Leadership for Patient Safety
 - Receiving Feedback
 - Socio-cultural Diversity
 - Decision Making and Situation Awareness
 - Thriving in BST Resources
 - Virtual Tutorial

- Medical Council Pillars of Professional Practice
- · Framework for Discussing Ethical Dilemmas
- Cases

Quarter 3: January - March

- Ethics: Confidentiality and Consent
 - Online Content
 - Effective Communication and Emotional Intelligence
 - · Journal Club: Learning and Presenting
 - · Records and Record Keeping
 - Virtual Tutorial
 - · Ethics: Confidentiality and Consent

Quarter 4: April - June

- Leading for Patient Safety
 - Online Content
 - · Giving Effective Feedback
 - Communication: Conflict Resolution
 - Virtual Tutorial
 - Safety Culture

Year Two

Quarter 1: July - September

- Healthcare Ethics
 - Online Content
 - Introduction to Conducting Research
 - Fundamentals of Quality Improvement and Quality Strategies
 - · Thriving in BST Prep Material
 - Self-Reflection on Communication Activity
 - Virtual Tutorial
 - Ethical Dilemmas
 - Bias
 - Legality

Quarter 2: October - December

- · Thriving in BST
 - Online Content
 - Leadership
 - Teamwork
 - Time Management
 - Communication in the Workplace
 - Research
 - Clinical Research Question
 - Literature Review and Systematic Review
 - Virtual Tutorial
 - Career Decisions
 - CV and Interview Preparation
 - Imposter Syndrome
 - Burnout

Quarter 3: January – March

- Leadership and Management Challenges and Patient Safety
 - Online Content
 - Clinical Communication
 - Psychological Safety in a Team
 - Leadership and Challenging Authority Constructively
 - Supporting Colleagues
 - Open Disclosure Principles
 - Virtual Tutorial
 - Leadership and Management Challenges
 - Threat and Error management
 - Raising and Reporting Safety Concerns
 - Patient Safety
 - Near Misses and Errors
 - Adverse Incidents

Quarter 4: April - June

- Report Writing for Histopathology
 - Online Content
 - Thriving in BST Resources
 - Equity in Healthcare and Sustainable Use of Resources
 - QI Project on Sustainability
 - Pathologists Role in House Case and Coroners case
 - Report Writing
 - Virtual Tutorial
 - Preparation of Surgical Pathology Reports
 - Preparation of Autopsy Reports
 - Verbally Communicate and Discuss Reports

Outcomes

By the end of BST, the Trainee will demonstrate an ability to or have:

- 1. Attended the required number of Grand Rounds
- 2. Attended the required number of MDT Meetings
- 3. Attended the mandated number of Journal Clubs
- 4. Attended the required number of National and/or International Meetings
- 5. Deliver Teaching
- 6. Perform Audit and QI activities
- 7. Completed Personal Goals Form
- 8. Completed Quarterly Assessment/End of Post Assessments
- 9. Completed End of Year Evaluation