Proposed Digital Pathology Training Programme for Histopathology Trainees

This programme is intended for histopathology trainees with the region, but will be suitable for our regional trainees in Paediatric & Perinatal Pathology and in Diagnostic Neuropathology with input from the respective Training Programme Directors in region. There will be a multiprofessional approach to the delivery of training, with provision of training in a variety of modalities.

Aims & Objectives of a Training Programme in Digital Pathology

1. Developing Understanding & Competence in the use of Digital Pathology in the Diagnostic Setting

- To develop the understanding of the utility of digital pathology in the clinical diagnostic setting in surgical pathology.

- To facilitate the development of confidence in the use of digital pathology in the setting of primary diagnosis within surgical histopathology.

2. To provide an overview of the process of implementation of digital pathology in a diagnostic setting within the setting of an NHS department.

3. To provide insight and experience of digital pathology applications within the research and artificial intelligence setting, and thereby to foster academic interest in the application of digital pathology within the research setting.

4. To build on the applications of digital pathology within the education and training setting within a regional specialty training programme.

How will these aims & objectives be delivered?
The proposed components of the training programme.

The delivery of training to satisfy the aforementioned aims and objectives will be multifaceted. There will be an introductory component, but training thereafter will be a more continuous 'hands on' approach, supplemented by additional formal training as necessary. Feedback on training will be sought regularly, both formally and informally, and the training programme will be re-evaluated and adapted in line with feedback, and with additional formal guidance, for example from the Royal College of Pathologists, as this becomes available.

The aims & objectives will be met as follows;

1. Developing Understanding & Competence in the use of Digital Pathology in the Diagnostic Setting

    - To develop the understanding of the utility of digital pathology in the clinical diagnostic setting in surgical pathology.

- To facilitate the development of confidence in the use of digital pathology in the setting of primary diagnosis within surgical histopathology.

Introductory Course in the Utility & the Implementation of Digital Pathology in the Diagnostic Setting

This short course will be delivered within the digital centre and will be focussed on local experience to date:

- Overview of digital pathology in the diagnostic setting & the local process of implementation and transition to the digital platform
- Digital pathology & laboratory workflow considerations
- Digital pathology & IT considerations
- Digital pathology & governance considerations
- Royal College of Pathologist Guidance - Best Practice Recommendations Guidance & the validation process
- Recognised challenges & pitfalls in the use of digital pathology in the diagnostic setting
- Overview of local experience to date

- Laboratory tour to demonstrate laboratory workflow and technology changes, and the scanners

- Practical demonstrations of digital platform

A certificate will be provided to evidence attendance at this course for the training portfolio.

Provision of access to digital pathology set-up in all training rooms within region with a designated calibrated monitor and access to digital platform/IMS

Provision of formal training from the local digital pathology provider

Ongoing guidance as necessary from consultant histopathologists validated to report on the digital platform

Provision of local training sets (validation sets) for trainees which will provide experience in viewing;

- Range of cases routinely seen (tissue types, specimens, preparations, stains)

- Cases demonstrating difficult diagnoses/features

A certificate will be provided to evidence completion of the training set, for the training portfolio.

Provision of relevant reference literature on digital pathology

2. To provide an overview of the process of implementation of digital pathology in a diagnostic setting within the setting of an NHS department.

This will also be covered by the 'Introductory Course in the Utility & the Implementation of Digital Pathology in the Diagnostic Setting.'

3. To provide insight and experience of digital pathology applications within the research and artificial intelligence setting, and thereby to foster academic interest in the application of digital pathology within the research setting.

Ongoing academic training days on the theme of digital pathology

Continued close collaboration with colleagues in the research setting to continue to foster academic research in digital pathology

Opportunities for trainees to undertake research projects with a digital pathology/artificial intelligence theme

4. To build on the applications of digital pathology within the education and training setting within a regional specialty training programme.

Remote 'live' teaching sessions from the digital centre to trainees in peripheral hospitals within region.

Future considerations

Development of e-learning module to deliver more general aspects of training, such as technical aspects of digital pathology/whole slide imaging, trouble-shooting, and health and safety considerations.