



The Royal College of **Pathologists**

Pathology: the science behind the cure

### **Digital Pathology Committee**

A meeting was held on Wednesday 1 March 2023 at 10.00  
hosted by the Royal College of Pathologists via Microsoft Teams

**Dr Lance Sandle**  
**Registrar**

**Present:**

Prof Darren Treanor, Chair  
Dr Muhammad Aslam, Pathologist, Wales  
Dr Gareth Bryson, Consultant Pathologist, Scotland  
Prof David Snead  
Dr Samar Betmouni, Neuropathology representative  
Dr Bethany Williams, Digital Pathology Fellow, Leeds  
Prof Claire Verrill  
Prof Roberto La Ragione, Veterinary Pathology SAC Chair  
Prof Simon Cross, Consultant Histopathologist, Sheffield  
Mr Ashley Ballard, IBMS  
Mr Richard Haigh, NHS Digital  
Mr Robert Longstaff, NHS Digital  
Mr David Walton, NHSX

**In attendance:**

Joanne Brinklow, Director of Learning  
Richard Smith, Head of Professional Practice  
Louise Mair, Governance and Committee Services Officer

**Apologies:**

Prof Sarah Coupland, Vice President Communications  
Dr Paul Barrett, Histopathology representative  
Dr David Shelton, Consultant Cytopathologist and Cytopathology  
SC Representative





	Minutes (unconfirmed)
<b>DP1.01/23</b>	<b>Welcome, apologies and declarations of interest</b>
<b>a)</b>	The Chair welcomed members to the meeting. Apologies for absence were noted and recorded above.
<b>b)</b>	There were no new declarations of interest received.
<b>DP1.02/23</b>	<b>Minutes of the last meeting, Actions, Matters Arising</b>
<b>a)</b>	The minutes of the meeting held on 19 October 2022 were approved as a correct record.
<b>b)</b>	<p>The following updates to the action log were noted:</p> <p>DP1.04/22b Committee members to let the Governance and Committee Services Officer know if they want to lead or join the sub-group for the DP/AI curriculum and come up with recommendations by the next DP meeting. Since the last meeting, Dr Betmouni has volunteered to join the sub-group, the action will remain open to attract more volunteers from the committee.</p> <p>DP1.08/22 Dr Williams to make a proposal for The Committee to review at the November DP meeting. Action to remain open.</p> <p>DP1.12/22a The Chair and Mr Johns to draft a statement for the Diamond Jubilee to include DP Committees' achievements. The Chair and Committee members contributed to the Bulletin; this action can be closed.</p> <p>DP1.17/22 The Chair and Dr Williams to contact Bridget Wilkins for the document on data retention periods for digital pathology data and circulate to the Committee for feedback and to summarise key areas. The Chair circulated the document to the working group but has not received a response, this action can be closed and then reopened when the working group engages with the committee.</p> <p>DP1.18/22 Ms Brinklow to investigate the exam structure for the veterinary microbiology examination and update Prof La Ragione. Ms Brinklow advised that a meeting around this is scheduled for this month, therefore this action can be closed.</p> <p>DP1.27/22 The Chair to provide Ms Brinklow with some volunteer's names from the Committee to review the current syllabus and feedback to the Cellular Pathology Committee. This action can be closed.</p> <p>DP1.28/22m Ms Brinklow and Dr Aslam to provide updates from the histopathology subgroup to the Dig Path committee meeting in March. Ms Brinklow and Dr Aslam advised that there is a meeting scheduled for March around this and will be able to provide an update at the next Digital Pathology Committee meeting. Action to remain open.</p> <p>DP1.29/22 Dr Betmouni to support with trainee surveys around experiences and attitudes to digital and digital examinations and to discuss this further with Dr</p>



	<p>Bryson. Dr Betmouni and Dr Bryson are currently drafting a survey for trainees and will provide an update on this to the Committee. Action to remain open.</p> <p>DP1.31/22f The Committees Services Officer to remove the pathology portal project as a standing item on the digital pathology committee meeting agenda. This has been completed and can be closed.</p>
<b>DP1.03/23</b>	<b>Governance</b>
a)	Workplan - The Committee reviewed the updated workplan for 2023 and noted the tremendous effort put into the RCPATH's AI position statement, which was recently approved by Council and feeds into the college's strategy development KPI.
b)	The Committee has been involved in discussions with NHS Digital around the potential to implement AI within digital pathology. Whilst the profession does not currently have the digital infrastructure to support an immediate implementation, the committee are keen to continue these discussions and be informed of the outcomes from the upcoming AI implementation within radiology. The results of this could advise the profession's future plans for implementing AI when it has the digital functionality to support it.
c)	The Chair asked the Committee to send any suggestions around additions to the workplan to the Governance and Committees Services Officer.
<b>DP1.04/23</b>	<b>Update on experiences with AI deployment</b>
a)	Dr Bryson confirmed that he had recently carried out a retrospective cohort study with malignant and benign prostate biopsies on an external AI platform. Dr Bryson feels that the main advantage of using the AI platform has been using the cloud-based server, which is very well resourced. However, there is some concern around low specificity of the system and the potential to diagnose a malignant tumour when it is benign.
b)	Dr Aslam advised that he is using a live AI platform, three health boards in Wales are currently using it and three others are in the pipeline to use it. Dr Aslam advised that there has been some initial reluctance amongst pathologists to use digital pathology, but this has been mostly overcome by the benefits of using AI. The main benefit highlighted is the high sensitivity of the system, a recent audit comparing results with previous practices identified a 13% increase in cancer detection. Grade 2 and 3 cancer pick up rates have been stable but Grade 1 and Grade 4-5 has slightly increased when using the platform. Dr Aslam reiterated Dr Bryson's concerns that diagnostic specificity isn't there yet, but he can see the potential benefits in the future.
c)	Dr Aslam is currently working on the automatic generation of the reports, this has been a challenge, as the AI algorithm is not linked with the laboratory information system. The reports will be available on the LIMS, with some editing required. Dr Aslam has observed that using a cloud-based server is more user friendly than using their current digital pathology, this has provided the option to access cases outside the NHS environment, although it has mostly been on prostate than breast. There has also been an observation that diagnostic benefits on breast screening are low in comparison to prostate screening.
d)	Prof Verrill provided a presentation on a live study for Paige Prostate on real life cases in three NHS settings in Oxford, Coventry and Bristol.

	<p>The Committee noted that prostate AI is one of the most mature technologies on the market and Prof Verrill will have access to the Paige breast suite shortly.</p> <p>e) Prof Verrill advised that the main technical challenge she has faced with using AI is with the deployment rather than using the programme, she is currently in the process of creating guidance for others to follow, as the current data protection impact assessments are over 14 pages long and each guideline is slightly different for each site. There have also been barriers with ensuring a deidentified workflow and the sharing of data outside of the NHS firewall. The Committee noted that there have some issues around engagement with digital pathology vendors and LIMS vendors which requires improvement.</p> <p>f) Prof Verrill reiterated the benefits highlighted earlier, but advised there are limitations with her particular study as they are not making real patient decisions. Prof Verrill also raised some concern that the algorithm tool identifies areas of interest, and emphasised the need to ensure there is clear language around AI, especially around non-medical staff. There is also the issue that the results are binary, either stating 'suspicious of cancer' or 'not suspicious of cancer' which limits the nuance in a natural setting when assessing a diagnosis. The Committee agreed that this is partly due to the nature of AI and regulatory approval around thresholds for acceptable levels of uncertainty.</p> <p>g) Dr Betmouni queried whether the study would have an impact on patient outcomes, Prof Verrill advised that it would and that the study closes in February 2024 which will provide meaningful data and impact patient's ultimate clinical outcomes.</p> <p>h) Prof La Ragione advised that AI is being used in veterinary pathology and that he has been looking at soft tissue sarcomas, in these studies they have been looking at the data around the clinic of the animal, i.e. metadata, the slides and diagnosis / outcomes. Prof La Ragione has recently published a paper around case study findings with sarcomas in dogs which might be useful to the AI overall discussion. The Chair suggested that Prof La Ragione provide an update on this at the next meeting.</p> <p><b>Action: Prof La Ragione offered to provide an update at the next meeting on the case study findings published on sarcomas in dogs.</b></p>
<b>DP1.05/23</b>	<b>Events</b>
a)	Dr Bryson advised that the digital pathology conference is scheduled for 24 March and highlighted the considerable work driven into producing an exciting programme for attendees. However, Dr Bryson raised concerns around attendance numbers, as only 15 attendees have registered for the event. The Committee noted the challenges that have arisen with organising the event, particularly around finding suitable speakers, the event fees and publicising the event.
b)	The Committee noted that the fee may be preventing trainees from signing up to the event and acknowledged that most attendees have opted for the remote option rather than in-person due to pricing. Dr Bryson queried whether the event should be cancelled due to low numbers or made purely virtual as only a small number of attendees will be travelling to London for the event. There has also been a scheduling clash with another prominent digital event in London, which is

	<p>scheduled for the day before this conference and is likely to have had an impact on attendance.</p> <p>c) Prof La Ragione commended the incredible work put into this by Dr Bryson and the events team, particularly praising the planned programme. Prof La Ragione recommended that Dr Bryson explore professional sponsorship of the event so that it could be free to trainees and garner more interest and attendance. The Committee noted the success of last year's veterinary pathology summer school for trainees which was sponsored and resulted in a large turnout.</p> <p>d) Prof La Ragione advised that veterinary pathology trainees were initially unsure whether the event would be focussed on medical trainees and many trainees could not afford the fee. The Committee discussed the viability of making the event free, Prof La Ragione felt that although it would be short notice, veterinary pathology trainees would be likely to sign up for a free online event.</p> <p>e) Mr Smith advised he would review the level of fee charged at events, as member engagement is a priority to the college. Mr Smith also suggested that the content for this event could be delivered as fortnightly or monthly presentations with a Q&amp;A to promote engagement within the specialty. However, it was agreed that attendees who have paid would need to be fully refunded if the material was being made available for free after the event.</p> <p>f) Ms Brinklow advised that there may be an influx of registrations in the weeks leading to the event, as the event will be heavily advertised by the events team on social media. Dr Bryson, Ms Brinklow and Mr Smith agreed to discuss this further after the meeting and explore the potential options and make a decision on the event.</p> <p><b>Action: Ms Brinklow and Mr Smith to liaise with the events team on Thursday in the office and bring some options to Dr Bryson by the end of this week to decide whether to go ahead with the event or not.</b></p>
<b>DP1.06/23</b>	<b>Update on NIHR HTA trial for digital pathology in screening</b>
	There was no update in the absence of Dr Snead.
<b>DP1.07/23</b>	<b>Curriculum and training</b>
a)	This item was covered in discussion when reviewing the previous minutes at the beginning of the meeting.
<b>DP1.08/23</b>	<b>Examinations</b>
a)	This item was covered in discussion when reviewing the previous minutes at the beginning of the meeting.
<b>DP1.09/23</b>	<b>RCPATH position statement on Artificial Intelligence in Pathology</b>
a)	The Chair thanked the Committee for their contribution to the RCPATH position statement. It was recently approved by college council and will be published on the digital pathology section of the website.
b)	The Committee noted that the Royal College of Radiologists and other colleges have also put out similar, but slightly different position statements.

	The Committee agreed that as a College we need to ensure that that our professional views and knowledge are considered when strategies are made nationally, and this is a positive first step in achieving this.
<b>DP1.10/23</b>	<b>Environmental Sustainability</b>
<b>a)</b>	The Chair encouraged members to consider how environmental sustainability can be improved in laboratory practices. The Committee agreed that meeting remotely is helping with environmental sustainability.
<b>DP1.11/23</b>	<b>Updates from External Representatives</b>
<b>a)</b>	NHSX (David Walton)
	Mr Walton advised that work led by the NHS CMO is being carried out, focussing primarily on implementation of AI within radiology, as it is an area identified where products are closest to market and the Secretary of State is keen for this to be implemented by winter 2023.
	Mr Walton clarified that AI is being designed to augment and support clinical decision making, not as a replacement for medical expertise and will not be a panacea for the current workforce challenges faced. Mr Walton apologised if the narrative or language around this has been unclear.
	The Chair thanked Mr Walton for the work being done around AI and emphasised that everyone wants the best outcome for patients using this technology and appreciates the nuanced feedback around this.
<b>b)</b>	Institute of Biomedical Science (Ashley Ballard)
	There was no update in the absence of Ashley Ballard.
<b>c)</b>	NHS Improvement (Jane Mills)
	There was no update provided in the absence of Jane Mills.
<b>d)</b>	NHS Digital (Richard Haigh and Robert Longstaff)
	Mr Haigh asked the Committee to consider using FHIR based messaging in the future, particularly in terms of enabling interoperability. The Committee noted that NHS Digital are in a development cycle with the FHIR Team. There is an estimated timeframe of Mid-Summer this year to launch it and asked the Committee to let him know if they are interested in learning more about this initiative.
	Mr Haigh provided an update on the Unified Test Lists and acknowledged that the main focus had initially been on microbiology but will begin to become available for other specialities shortly.
	Mr Haigh advised that his department is in the process of a merger, therefore any AI initiatives will be dependent on the outcome of that process and future budgets but will keep the Committee updated on any developments. Mr Haigh also recommended meeting with Mr Walton to discuss the AI initiatives and the standards needed to support that in the future.
	Mr Longstaff shared a slide presentation tracking the maturity of digital pathology since 2021. The target for 2025 is for 27 networks to have 50% investigations used for primary diagnosis. There is currently a big shift towards utilisation of this capability across the networks which is promising.

	<p>Mr Longstaff acknowledged challenges raised around LIMS capability in the NHS. NHS Digital is investing in LIMS but recognise that not all of the suppliers have the capability needed. The Committee noted that Cellular pathology LIMS is not quite where it should be, NHS Digital is looking at the procurement process to explore a single route to market for current or diagnostic solutions which will be the London Partnership procurement route, and engaging with all suppliers so they are aware of the requirements to work towards DICOM compliance.</p> <p>Dr Bryson highlighted that NHS Scotland will be using Citadel Health as a LIMS supplier and there was a discussion around working collaboratively with NHS England.</p> <p>There was a discussion around cellular pathology LIMS standards and not having a cellular pathology work stream, it was agreed that the underlying issue with back-end infrastructure needs fixing and more focus on cellular pathology standards is needed to support the implementation of AI.</p> <p>The Chair thanked Mr Longstaff and his team for their hard work on supporting the pathology community under challenging circumstances.</p>
<b>e)</b>	Public Health England (Anne Mackie)
	There was no update provided in the absence of Anne Mackie.
<b>DP1.12/23</b>	<b>Any Other Business</b>
<b>a)</b>	Prof Cross provided an update on the pathology portal and highlighted the functionality to produce a simple screen recording of a case study and the ability to add commentary to the recording. The Committee were impressed by the short time it takes to produce and the minimal editing needed and agreed it could be a valuable training tool for trainees.
<b>DP1.13/23</b>	<b>Dates of Future Meetings</b>
	Wednesday 21 June 2023, 10.00.
	The meeting closed at 11.53am.