RCPath/IBMS Northern Symposium: Pathology and People

**Held at the Cloth Hall Court
Quebec St, Leeds LS1 2HA**

Wednesday 18 October 2023

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General Information

Certificates of attendance
Certificates of attendance will be emailed to all attendees, within a fortnight of the conference. This symposium is eligible for 4 CPD credits.

Speaker presentations
Where permission has been given, speaker presentations will be available for participants to access after the event.

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RCPath/IBMS Northern Symposium: Pathology and People

Wednesday 18 October 2023
Cloth Hall Court, Quebec St, Leeds LS1 2HA

CPD Credits: 4

09.30   Registration

10.15   Welcome
Dr Ali Robb, *RCPath Regional Representative for the North*
Joanna Andrew, *President Elect, IBMS*

Keynote: The Future of Pathology
Debra Padgett, *President of IBMS*
Professor Mike Osborn, *President of RCPath*

10.45   Transition to breakout 1

10.50   **Breakout 1** – choice of four sessions:
Future Pathology Workforce: Unleashing the Power Through Networks (Herringbone Suite)
Ms Michelle Payne, *Strategic Pathology Workforce and Education Lead, North East and North Cumbria Integrated Care System, Newcastle Upon Tyne Hospitals NHS FT*
Trudy Walker, *Network Training Manager, York and Scarborough Teaching Hospitals NHS FT*
Mr Gareth Richardson, *Workforce Development Lead – Greater Manchester Imaging and Pathology Networks*

Health and wellbeing: There will be no scented candles in this session (Denim Room)
Dr Chris Tiplady, *Consultant Haematologist, Northumbria Healthcare NHS Foundation Trust; Honorary Senior Clinical Lecturer and Director of Undergraduate Studies for University of Sunderland; author of RCPath's Professional Development blog series*

Embracing differences in Pathology (Cotton Room)
Dr Hebah Ali, *International Education Lead, Royal College of Pathologists; Consultant Haematopathologist, Leeds Teaching Hospitals NHS Trust*
Mrs Tahmina Hussain, *Lecturer in Biomedical Science,* IBMS, *University of Salford*

Reducing Carbon Footprint in Patient Pathways (Wool Room)
Ms Jennifer Collins, *Microbiology Laboratory Manager, Newcastle Upon Tyne Hospitals NHS FT*
Ms Sheri Scott, *Senior Lecturer in Biomedical Science, Nottingham Trent University*

11.20   Coffee break and networking (poster viewing and sponsor networking)

11.45   **Breakout 2** – choice of four sessions (see Breakout 1 for details)

12.15   Lunch and networking (poster viewing and sponsor networking)

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13.15 **Breakout 3** – choice of four sessions:
Leading with compassion: a coaching perspective (Cotton Room)
Dr Ali Robb, *RCPath Regional Representative for England (North); Consultant Microbiologist, Newcastle Upon Tyne Hospitals NHS FT; Head of School for Laboratory Medicine for Health Education England North East*

Update on UKAS key projects including 15189:2022 Transition (Breakout 3, Denim Room)
John Ringrow, *Senior Assessment Manager, UKAS*

UKAS ISO 15189 implications for Blood Culture Pathway (Breakout 4, Denim Room)
Mark Prescott (Senior Assessment Manager)

The role of Clinical Scientists in infection services; how they contribute to patient care, and how to grow your own (Wool Room)
Dr Robert Shorten, *Consultant Clinical Scientist, Lancashire Teaching Hospitals NHS FT*

Future of Diagnostics: Point of Care Testing (Herringbone Suite)
David Wells, IBMS Chief Executive

13:45 Transition to breakout 4

13.50 **Breakout 4** – choice of four sessions (see Breakout 3 for details)

14.20 Tea break and networking (poster viewing and sponsor networking)

14:45 **Keynote:** Sustainable Healthcare: Caring for Patients AND Planet
James Dixon, *Head of Sustainability at Newcastle Hospitals*

15:15 Summary
Dr Ali Robb, *RCPath Regional Representative for the North*
Joanna Andrew, *President Elect, IBMS*

15:30 **Close**

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Presenters

Professor Mike Osborn, RCPath President
Professor Michael Osborn studied medicine at Guys & St Thomas Hospitals, London qualifying in 1995. He became a member of the Royal College of Surgeons in 2000 and a Fellow of the Royal College of Pathologists in 2004. Currently he works as a consultant histopathologist for North West London Pathology at Imperial College Healthcare NHS Trust, London where he is clinical lead. His working time is divided between post mortems, diagnostic gastrointestinal histopathology, bowel cancer screening and teaching. He runs an intercalated BSc "Humanities, Philosophy & Law" at Imperial College, London. During the COVID-19 pandemic he and colleagues at Imperial College published work relating to findings in fatal COVID-19 infection. He was elected President of the Royal College of Pathologists (RCPath) in November 2020 having previously been on the RCPath Council and having had a variety of college roles including chair of their Cellular Pathology Speciality Advisory Committee and Death Investigation Committee. He became a Professor of Practice at Imperial College in 2021.

Debra Padgett, President, Institute of Biomedical Science
Clinical Pathology Service Manager, Northumbria Healthcare NHS Foundation Trust; North East & North Cumbria Pathology Network Operational Lead
Debra is President of the Institute of Biomedical Science, Clinical Pathology Service Manager at Northumbria Healthcare NHS Foundation Trust and a chartered scientist.

In her role as IBMS President, Debra is dedicated to the promotion, development and delivery of excellence in all aspects of biomedical science and is committed to providing the highest levels of service to patients and the public. In her ten years as an IBMS Council member, she has advocated, listened, represented and addressed the issues that are most important to IBMS membership at national, regional and local levels.

Debra became IBMS President in 2022 after a career covering 24 years working in clinical NHS laboratories. She is an advocate for workforce development, innovation in healthcare and continuous quality improvement.

Her current roles encompass the provision of leadership and management with accountability for the delivery of cost effective, high quality, safe and sustainable services across the Northumbria and the wider health economy. These responsibilities give her a strategic insight to deliver operational priorities both for her own Trust and those of National programmes.

Her professional activities include Lead Healthcare Scientist for NHCT, Pathology Network Operational Lead for North East and North Cumbria ICS, committee member for BSI ISO 15189 mirror committee and STEM ambassador.

Dr Ali Robb, MBBS, MRCP (UK), FRCPATH, DIPCLINED
Ali trained in Newcastle and has been a Consultant Medical Microbiologist at the RVI in Newcastle since 2010. She is Infection Control Site Lead for Estates at the RVI, lead for Cystic Fibrosis microbiology and former Antimicrobial Stewardship lead.

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She is currently Head of School for Laboratory Medicine and Associate Dean for Quality and Revalidation for NHS England in the North East. She received an RCPath 'Excellence Award' for Contribution to Education in 2019.

Ali is a trained Coach and Mentor, gaining ILM5 in Coaching and Mentoring in 2019 and providing coaching and mentoring for the NHS and the Social Mobility Foundation.

Ali has been the elected England Regional Representative to RCPath Council for the North since 2020.

Joanna Andrew, Lead Biomedical Scientist, Blood Sciences, Scarborough, Hull and York Pathology Service
I am the network lead for Blood Sciences at Scarborough, Hull, York Pathology Service (SHYPS), responsible for managing blood sciences across 4 hospitals. I am currently President Elect of the IBMS, having served as Yorkshire region Council member for 5 years.

James Dixon, CENV FIEMA FRSA
Associate Director - Sustainability at Newcastle Hospitals
James is a Chartered Environmentalist with twenty years' experience. At Newcastle City Council he contributed to Newcastle being awarded UK's Greenest City two years running. At Newcastle Hospitals he established the Sustainable Healthcare in Newcastle (Shine) programme and led them to become the first healthcare organisation in the world to publicly declare the climate emergency as a health emergency.

James holds Fellowship positions at the Institute of Environmental Management & Assessment (FIEMA) and the Royal Society for Arts (FRSA) is Vice Chair of the Board at Health Care Without Harm Europe and Co-Chairs the Shelford Group of NHS Sustainability Leads.
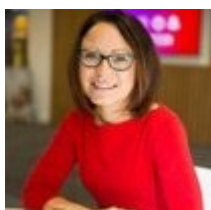
Michelle Payne
Michelle started her Biomedical Scientist career in the NHS before moving to Academia, during which time she was presented a national award for Collaborative Academic Teaching Excellence. She now works with regional and national stakeholders to support the pathology workforce in capacity, sustainability and development. She is chair of England's National Pathology Network Workforce and Education Collaboration, a group formed from the NHSE Pathology Practice Educator network. In her own Integrated Care System she established and works to deliver the NENC Pathology Workforce Strategy, embodying the recommendations of the Recovery and Renewal Report in the context of regional needs."

Trudy Walker
Scarborough, Hull, York Pathology Service - SHYPS
Trudy has worked for 20 years in the immunology department at the Hull laboratory. Her career has progressed from trainee Biomedical Scientist to Senior Biomedical Scientist. During her career she has completed an MSc in Pathological Sciences and the IBMS Higher Specialist diploma in immunology. She is a fellow of the IBMS and a registered chartered scientist. In 2021 she became the training manager for SHYPS.

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She has extensive experience as a Biomedical Scientist in immunology, a passionate training manager and more recently turned her focus to workforce development

Gareth Richardson

Gareth started his career as Biomedical Scientist in Clinical Biochemistry, and has always had a passion for training and staff development, progressing in his career from a departmental training lead to a divisional training manager for a large Pathology service in Manchester. Gareth has over 10 years of NHS laboratory experience with extensive experience in staff training and development and workforce planning, and is using this experience to help drive forward the workforce strategies for the Pathology and Imaging workforce in Greater Manchester.

Dr Chris Tiplady

Chris Tiplady is a consultant haematologist in Northumbria Healthcare NHS Foundation Trust. He has a Masters in Clinical Education and is an Executive Coach and Mentor as well as workplace mediator there. He has been a Regional Advisor for Health Education England and a Director of Medical Education. He is now one of the Directors of Undergraduate Clinical Studies for the new Sunderland University Medical School where he also leads the Masters in Medical Education Programme. Find him on Twitter @christiplady.
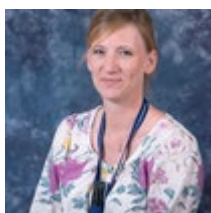
Jennifer Collins FIBMS, CSCI

Jennifer is a Laboratory Manager at Newcastle Hospitals NHS Foundation Trust with 36 years' experience in Biomedical Science. She manages a large team of approx. 100 staff who process >1.5 million patient samples per year. Jennifer is also the North East IBMS Council representative. She has previously sat on the IBMS Specialist Advisory Panel and has been an Examiner for Higher Specialist Diploma (HSD). Jennifer successfully completed the HSD in its inaugural year (2003).

Jennifer is a keen environmentalist and a key member of the Integrated Laboratory Medicine Sustainability Committee at Newcastle. By inspiring, informing and empowering staff, Jennifer aims to work more sustainably, reduce the carbon footprint related to laboratory activities and generate less waste; mainly focusing on reducing single use plastics wherever possible. Jennifer has been pivotal in attaining the Bronze LEAF Award in Integrated Laboratory Medicine in her Trust.
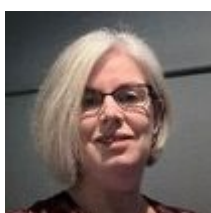
Sheri Scott

Sheri Scott is a Senior Lecturer at Nottingham Trent University.
Sheri joined Nottingham Trent University in 2018 after a career covering 22 years working in Clinical Biochemistry in NHS laboratories. She advocates for greener laboratory practice, both for her university, the NHS and internationally. Sheri is a core member of the EFLM green and sustainable labs taskforce and the IBMS sustainability lead. Sheri is a EAUC Green Gowns finalist for her commitment and contribution to Clinical Laboratory Sustainability.

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Dr Hebah Ali, MBBS FRCPath

Dr Hebah Ali is the International Education Lead of the Royal College of Pathologists. She is a Consultant Hematopathologist and Honorary Senior Clinical Lecturer based at HMDS Leeds. Dr Ali is passionate about education and training. She supports, guides and counsels International Medical Graduates and UK trainees through courses and mentorship programmes for CESR, FRCPath and Haematopathology. In the Royal College, she oversees the International Trainee Support Scheme for Histopathology and Sponsorship scheme for GMC registration. In 2021 she held a role to mentor and support SAS doctors in Leeds Teaching Hospital. Outside of work, Hebah enjoys Arabic calligraphy and is an avid painter.

Tahmina Hussain

Tahmina Hussain, Programme Lead for Biomedical Science Apprenticeship Degree, Lecturer in Biomedical Science and IBMS National Council Representative

Tahmina is the Programme Lead for the Biomedical Science Apprenticeship Degree and a Lecturer in Biomedical Science at the University of Salford. Her career as a Biomedical Scientist began in 2009 and has since specialised in Haematology and Blood Transfusion and then progressed through a number of roles such as Biomedical Scientist Team Manager, Blood Sciences Training Officer and Pathology Training Coordinator. Tahmina is an IBMS national Council member, verifier and examiner for registration and specialist portfolios, module lead for the IBMS Certificate of Expert Practice in Training Qualification, IBMS EDI Lead and a panel member of the Transfusion Specialist Advisory Board.

John Ringrow

After gaining a degree in Biochemistry and Microbiology from Leeds University, John's first post was as a company microbiologist in a small scientific consultancy specialising in foods, waters, cosmetics and pharmaceuticals and sterile manufacture processes. His main interests however were in medical microbiology, so he joined Poole PHLS and hospital microbiology laboratories, where he completed the then IBMS Special exam.

John then moved to County Durham, developed an interest in management and quality, gained qualifications in such and held senior, management then quality management posts until the end of 2005.

John joined CPA (UK) Ltd as a full time Regional Assessor in January 2006. CPA is now a wholly owned subsidiary of the United Kingdom Accreditation Service (UKAS) and since June 2013 he was an Assessment Manager (AM) with UKAS and from November 2014, promoted to Senior Assessment Manager. John manages other AMs and is active in various projects, including training in ISO 15189:2012 and ISO 22870:2016 and training for new AMs. He also leads on promoting, marketing and communications for the Healthcare Section.

John has been involved in and tutored on courses for the IBMS, been a training/portfolio assessor for the CPSM and then IBMS, panel member for the HCPC and been a lay board member for the Northern Deanery involved with post graduate medical education. John has presented at numerous local and national meetings on both scientific and management themes, and since working for CPA and then UKAS, he now presents regularly on quality and accreditation themes. John has recently been awarded a life membership of the IBMS for his contribution to the Institute over many years and to support and development of Quality Management within medical laboratories.

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Mark Prescott

I have been with UKAS for over 10 years working as an Assessment Manager and Technical Assessor for Microbiology / Virology, also being the Technical Focus Person for these disciplines in the Medical Laboratories Section. I have significant experience of working in both NHS and private laboratory services before this. I predominantly assess against ISO 15189:2012 although also have assessment experience in standards for Proficiency Testing (ISO 17043) and Testing & Calibration Laboratories (ISO 17025).

Dr Robert Shorten

Dr Shorten is a Consultant Clinical Scientist at Lancashire Teaching Hospitals. He has broad experience in clinical microbiology and is the departmental lead for research, and the pathology lead for clinical audit. He is an honorary research associate at University College London, and his research interests have included tuberculosis, including completing a PhD in this field, as well as other papers in the areas of laboratory diagnostics, and viral haemorrhagic fevers. His current interests include diagnostic stewardship and environmental sustainability. He is also the current Chair of the Microbiology Professional Committee of the ACB, and a member of ACDP.

David Wells, MSC FIBMS CSCI Hon DSC FRCPath (Hon)

David is recognised as being one of the 100 powerful advocates for pathology in the global community. Until June 2021 David was leading the NHS England and Improvement Pathology consolidation programme, seeking to deliver efficient, high quality pathology services across England.

During the COVID 19 Pandemic David led NHS England's laboratory response across the country by managing technology deployment, capacity, funding and workforce to ensure that all capacity requirements were met. The role included advising ministers and healthcare leaders whilst providing policy and strategic direction as a subject matter expert.

In recognition of this work and the work in transforming England's pathology services, the Royal College of Pathologists awarded David Honorary fellowship of the college in 2020. David was also awarded honorary Doctor of Science by Anglia Ruskin University in recognition of his contribution to the national response during the pandemic. In 2021 David was awarded the CSO's Lifetime Achievement award again in recognition of his leadership of Pathology services during the Pandemic.

David has a diverse and almost unique experience of providing and leading pathology services to primary, secondary and tertiary care across all pathology disciplines and out into other areas of Healthcare science and diagnostics.

David has previously been an elected IBMS council member for the London Region. David has also represented the IBMS on NICE diagnostic advisory panels, and various national forums including an observer on the Royal College of Pathologist Council and in the Parliamentary and Science committee.

David was appointed Chief Executive of the Institute of Biomedical Science in June 2021 to lead this global professional body representing 21,000 members across 74 countries. Additionally, David was appointed the Scientific Lead for Pathology, for NHS London, in September 2021.

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Sponsors

We'd like to take this opportunity to say a special thank you to all our sponsors for supporting today's event. Thanks to your sponsorship, support and participation, we were able to offer reduced delegate fees.

We appreciate you investing your time, money and resources to help recognise and appreciate our delegates.

Please see information from our sponsors in the following pages.

Cirdan Unveils PathLite+ Macro-Imaging System at IBMS Congress 2023

Cirdan is thrilled to announce the launch of PathLite+, their new cutting-edge macro-imaging system to enhance pathology lab workflows with market-leading image quality, usability, and Laboratory Information System (LIS) integration. The event, which took place from September 25th to 28th at the International Convention Centre (ICC) in Birmingham, attracted attendees from across the Biomedical Science field, making it the perfect platform for the launch of the new PathLite+ macro imaging system. PathLite+ received exceptional reviews from attendees, reaffirming its potential to revolutionise macro-imaging in laboratories.

PathLite+ is a fully integrated imaging solution designed to enhance laboratory efficiency, streamline workflows, and ultimately improve patient outcomes. This user-friendly system, tailored for pathologists and biomedical scientists, not only saves valuable time and space but also reduces costs while delivering unparalleled image quality which is seamlessly integrated into existing laboratory processes.

Why PathLite+ is the future of Macro Imaging?

PathLite+ offers a wide set of advantages, the hardware boasts a 20.3 MP camera featuring fully automatic focus, exposure, and white balance, combined with a software-controlled variable zoom lens and optimised integrated lighting for capturing superior quality images. With the addition of built-in sensors to allow quick and simple distance calibration supporting accurate length measurement. All of which contribute to the efficient delivery of optimum gross imaging quality, setting new standards in the field of macro-imaging.

PathLite+ state-of-the-art hardware is seamlessly combined with the new web-based VividPath software to generate high-quality gross images within the pathology lab.

The intuitive VividPath software is designed for ease of use, allowing users to navigate the entire process in just four simple steps, requiring minimal training and preparation. Its key feature is the seamless integration capability, ensuring compatibility with Laboratory Information Systems (LIS). This integration empowers laboratories to further enhance efficiency and simplify their workflows.

Cirdan's PathLite+ is set to redefine the landscape of macro-imaging laboratory systems, offering unmatched efficiency, quality, and interoperability.

If you are interested in finding out more about PathLite+, contact us at: marketing@cirdan.com or visit www.cirdan.com.

For media enquiries contact: Rebecca Fitton, Marketing Manager, Cirdan
T: +44 (0) 28 9266 0880 **E:** rfitton@cirdan.com, marketing@cirdan.com **W:** www.cirdan.com

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Resources for Compassionate Leadership: a coaching perspective

- Compassionate Leadership by Michael West
- Coaching Skills: A Handbook by Jenny Rogers
- Future Learn MOOC
  - https://www.futurelearn.com/courses/an-introduction-to-leading-with-compassion-and-kindness-in-health-and-social-care/
- School for Change Agents
  - http://horizonsnhs.com/school/
- The King's Fund
  - https://www.kingsfund.org.uk/publications/what-is-compassionate-leadership
- Center for Compassionate Leadership
  - https://www.centerforcompassionateleadership.org/
- https://coachingandmentoringhub.nhs.uk/
- https://ney.leadershipacademy.nhs.uk/our-offers/coaching-and-mentoring/

Long COVID: Burnout and wellbeing in the post-pandemic NHS

Dr Ahmed Iqbal, Dr Hiba Alzein

Despite being four years removed from the peak of the COVID-19 pandemic, its aftermath is still being felt across the entirety of the National Health Service (NHS). Accident and Emergency wait times are on the rise, waiting lists are growing in size and there are a record number of staff vacancies[1,2]. This surmounting pressure on the healthcare system itself propagates through to affect its individual workers. Trying to combat the dissonance between meeting exponentially increasing demands with persistently dwindling resources is a daily battle[3]. On the background of increasing economic strain and ongoing industrial action, fatigue and burnout within the NHS is on the rise[4]. Defined as '*emotional exhaustion, depersonalisation, and a sense of low personal accomplishment that leads to decreased effectiveness at work*', burnout has been documented in healthcare professionals since 1974, but at this current moment, has never been more relevant[5,6].

Signs & Symptoms[7-9]
- Anxiety
- Anger
- Fatigue
- Insomnia
- Forgetfulness
- Isolation
- Poor appetite
- Lack of concentration and reduced performance
- Reduced motivation and job satisfaction
- Increased cynicism and negativity towards work

"What started out as important, meaningful and challenging work becomes unpleasant, unfulfilling and meaningless. Energy turns into exhaustion, involvement turns into cynicism and efficacy turns into ineffectiveness"

Christina Maslach

Consequences of Burnout

- Burned out staff are **twice as likely to make medical errors**[10]
- **45% of NHS staff** report feeling unwell due to work-related stress
- **1 in 3 nurses** felt 'emotionally exhausted' during the COVID-19 pandemic
- **18% of critical care nurses** report symptoms of post-traumatic stress disorder[11]
- Burnout is associated with the development of **cardiovascular disease** and **metabolic syndrome**
- **1 in 4 staff absences** are attributed to mental health
- **15.4 million sick days** due to stress since March 2020
- Stress-related absence costs the NHS **£400 million a year**

Patients
Burnout has been repeatedly demonstrated to have damaging effects on the quality and safety of patient care[12]. Various studies have shown that staff reporting high levels of burnout are more prone to medical errors[13, 14]. Higher levels of burnout have also been associated with increased rates of hospital-associated infections and have a negative affect on patient 30-day mortality and patient satisfaction[15, 16]. High levels of burnout have also been demonstrated to have an inverse relationship with empathy, a fundamental principle for all caring professions and an essential component of all patient interactions[17].

Staff
A 2021 meta-analysis found the prevalence of burnout symptoms during the pandemic was 52% across all healthcare workers[18]. A review on the wellbeing of nurses during the pandemic found that 34% of nurses reported high levels of emotional exhaustion, identifying working within critical care units and designated COVID areas as key risk factors[19]. In the most recent NHS staff survey, 45% of staff reported feeling unwell due to work-related stress, an increase of 10% compared to 2019[20]. Long-term workplace-related stress leads to increased rates of anxiety, depression, substance misuse, post-traumatic stress and suicide[7, 21, 22].

System
Since the first COVID-19 lockdown, 15.4 million stress-related absences have been recorded in the NHS[23]. Mental health and wellbeing problems led to 6 million absences in 2022 alone, accounting for 23% of all reported sickness that year[24]. It is estimated that stress-related absences cost the NHS £400 million a year[25]. Recent analysis has also shown that that any mental health-related absence increases the likelihood of staff resigning within three months by up to 58%[26].

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Wellbeing Strategies

Primary Prevention
"Prevention is better than cure" is a fundamental principle in modern healthcare with the same applying to burnout within staff working in this field. **Organisational interventions** are key in aiming to identify and mitigate the causes of workplace stress[27]. Six key areas have been proposed when addressing the multifaceted problem of burnout: **sustainable workload**; **choice and control**; **recognition and reward**; **supportive work community**; **fairness, respect and social justice** and **clear values and meaningful work**[28]. Involving staff in creating workplace change acknowledges and utilises their expertise within their personal work environment in order to implement effective changes and also reduce the risk of resistance[29]. For example, The Sherwood Forest Hospitals NHS Foundation Trust introduced a nurse-led initiative encouraging staff to *'Rest, Rehydrate, Refuel'* which included setting individual break times at the beginning of shifts to ensure they were taken. Staff could adjust the timing of their breaks depending on their workload, thus they became part of their job list, reinforcing the importance of taking adequate rest throughout a shift[30]. The University of Virginia's School of Nursing has also successfully introduced and maintained a '*Compassionate Care Initiative*' through the effective use of resilience training, drop-in wellbeing sessions and implementation of compassionate care ambassadors in promoting staff wellbeing throughout the organisation, including an emphasis on their medical and nursing students to impart the importance of wellbeing onto the next generation of healthcare professionals[31].

Secondary Prevention
Mindfulness plays a key role in many wellbeing interventions and is defined as *"the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment"* [32]. Such interventions have been shown to be effective at helping healthcare professionals process the emotionally taxing elements of their work to reduce stress and anxiety as well as improve compassion and empathy[33]. The use of **Schwartz Rounds** as a way for healthcare staff to collectively discuss and reflect on the emotional and ethical challenges of patient care have been demonstrated to have a positive effect on reducing distress and preventing compassion fatigue and burnout[34, 35]. Other approaches include the introduction of **music therapy**, which was shown to reduce anxiety, depression and psychosomatic symptoms in oncology nurses by attending weekly percussion sessions[36]. A recent review discussed the positive impact gardens and gardening can have on mental and physical wellbeing[37]. The Centre for Sustainable Healthcare has also published research highlighting the positive effect **green spaces** within healthcare settings have on personal wellbeing and helping interprofessional relationships, providing an ecologically conscious initiative to tackle workplace stress[38].

Tertiary Prevention
Occupational health services play a key role in supporting the physical and mental health of the healthcare workforce, particularly in cases of burnout and work-related stress[39]. Investment into robust occupational therapy access can be costly, however the use of **peer support groups** have been shown to be an inexpensive and effective way of promoting staff wellbeing[40]. Discussing emotional hardships with individuals experiencing similar issues creates a sense of community and can alleviate stigma surrounding mental health challenges within the healthcare profession[41]. The use of **positive psychotherapy** has also been shown to improve self-efficacy and job performance whilst also reducing self-reported exhaustion in nurses suffering with burnout[42, 43]. The use of '**Wellness Recovery Action Plans**' can provide frameworks for identifying stressors and creating effective coping strategies through the use of wellness techniques[44]. Clearly defining individual threats to personal wellbeing and identifying actions required to manage these challenges are invaluable in helping individuals improve and maintain good wellbeing following stress-related absence[45].

Burnout is not a new issue within healthcare or the NHS but the pandemic has compounded the stress on an already over-stretched system. It is clear the detrimental effects burnout has on individuals and the collective organisation. There are various strategies organisations can introduce to target the issue, ranging from inexpensive adjustments to workplace logistics to more labour- and cost-intensive wellbeing programmes and initiatives. Tackling the issue of chronic stress and emotional fatigue is essential in ensuring a happy workforce that can provide top-quality care to patients: **healthy staff make healthy patients**.

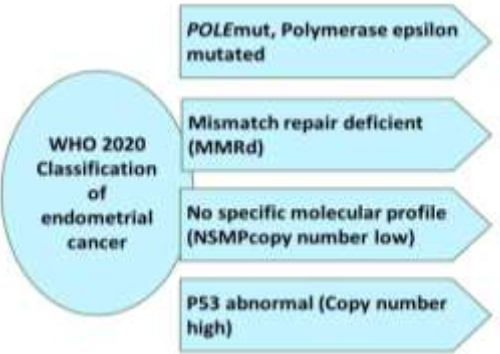# Histopathology Directed Molecular Testing in Endometrial Carcinoma – In Resource Constrained settings

Dr.Vinay Bhatia, Dr. Shilpa Mishra, Dr. Rakesh Rajiv Patkar
Oncquest Laboratories Ltd – Microcraft Pathology LLP Mumbai (Theme – Sustainability)

INTRODUCTION –
Endometrial Carcinoma - A common gynaecological malignancy

WHO 2020 Classification of endometrial cancer
- POLEmut, Polymerase epsilon mutated
- Mismatch repair deficient (MMRd)
- No specific molecular profile (NSMPcopy number low)
- P53 abnormal (Copy number high)

OBJECTIVE:
- To study morphological-molecular correlation and to assess feasibility of histology directed molecular testing in low-income countries

METHODS: Retrospective dual center study
- Paraffin blocks stained with H&E, IHC (MLH1, PMS2, MSH6, MSH2 & P53) POLE-edm assessed by **Sanger sequencing**
- Inclusion criteria- Cases of endometrial carcinoma with morphological & molecular details

RESULTS & DISCUSSION
- Histopathology: EC II: 44.4%,III: 50% & Clear cell carcinoma – 5.6%
- POLEmut was absent in all our cases (prevalence 7–12% of endometrial cancers)
- POLEmut – Neoantigens – TILS

Case	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
AUB	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ET +	+		+	+			+	+				+						+
MASS		+			+	+			+	+		+	+	+	+	+	+	
EC II	+	+	+	+	+	+		+	+									
EC III				+				+	+	+			+		+	+	+	+
CCC													+					
POLE	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
MSI							+			+	+	+		+	+			
P53	W	M	W	W	M	M	NA	W	W	M	NA	NA	M	M	M	M	M	M

Findings in all 18 cases
Abbreviations: AUB – Abnormal uterine bleeding, ET+ Increased endometrial thickness, Mass: Presence of intrauterine mass, EC II – Endometrioid carcinoma grade II, EC III – Endometrioid carcinoma III, CCC- Clear cell carcinoma, POLE- Gene for polymerase epsilon, MSI-Microsatellite instability, + (present), N (Negative), M (Mutated), W (Wild type) NA (Not applicable)

- MMRd - 33.3% (6), P53 mutated - 58.9% (9), wild type - 17.6%(3), Others-NA
- One case – Heterogenous MLH1, PMS2
- P53 mutation is detected in about 25% of all endometrial cancer patients (More in EC III) and have the worst prognosis.
- Prognosis of POLEmut cases is better
- MMRd & NSMP – Low Intermediate risk
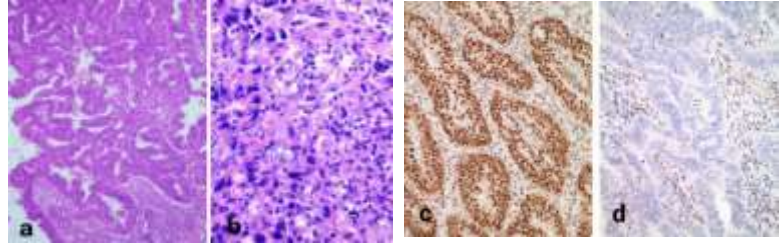- MMRd – Evaluate for Lynch syndrome

Figure 1[a] EC II, [b] grade III with lymphocytes [c] Intact nuclear expression MLH1 [d] Loss of nuclear expression in tumour cells, lymphocytes positive as internal control (400x IHC)
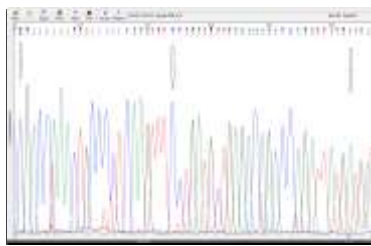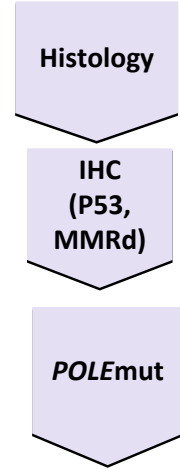

Figure 2: Electropherogram: Wild type for Exon 9 of POLE Gene for T278M, P286R, M295R

Morpho-molecular correlation [1]

Microscopy	POLEedm	MMRd	p53mut	NSMP
Smooth luminal borders	++	+	-	+++
Hobnailing	-	+	+++	-
Solid growth	+++	++	+	+
Squamous differentiation	+	+	-	+++
Nuclear atypia	++	+	+++	+
Tumor giant cells	+++		+	-
Peri-tumoral and intra-epithelial infiltrate of lymphocytes	+++	++		
Tertiary lymphoid structures (TLS)	+++	++	+	-
Microcystic elongated and fragmented (MELF)	-	+	-	++
Lymphovascular space invasion (LVSI)	+	++	+	+
MMRd on IHC	+	+++		
P53mut	+	+	+++	-

Histology

↓

IHC (P53, MMRd)

↓

POLEmut

CONCLUSION
- Molecular classification provides prognostic and treatment information. Due to inadequate access in low-income countries; the knowledge of different histological features, staging and optimization of resources is prudent for equitable and optimal care.

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Addressing Social Disparities in Medical Representation: Promoting Pathology Careers for High-Achieving 6th Form Students from Lower Socioeconomic Backgrounds

Caroline Cartlidge   *Department of Histopathology, Leeds Teaching Hospitals NHS Trust and Pathology and Data Analytics, University of Leeds, Leeds, UK*

Introduction

- Medicine faces significant disparities, with only 6% of doctors from working-class origins [1].

- Research shows individuals with doctor parents are 24 times more likely to become doctors themselves [1].

- The cost-of-living crisis has further impacted lower socioeconomic background students, altering their university plans at higher rates than their more privileged peers [2].

- We developed a pathology programme for 6th Form students from lower socioeconomic backgrounds with the following aims.

Aims

1. Provide insights into medicine/pathology careers.

2. Foster professional skills.

3. Establish supportive networks.

Methods

- Eight Participants from two 6th Form Colleges across England attended a two-day summer pathology programme at Professor Quirke's Laboratory, University of Leeds.

- The programme included sessions on pathology careers, laboratory tours, histology, microscopy, and microbiome sequencing.

- Students interacted with medical students, received application tips, and gained awareness of careers in pathology and research.

- Students were asked to complete a pre and post pathology programme survey to gather feedback

Results

- Student feedback was encouraging, with 100% expressing enjoyment and new knowledge about pathology.

- All students considered a pathology career when not previously contemplated, and all recommended the programme.

- Students displayed increased interest and appreciation for pathology, understanding its significance in caring for the living and the deceased.

- Overall, the feedback indicates positive experiences of the programme and reflects themes of increased awareness, education and greater appreciation for pathology (Figures 1-3).

- Great insight into the work of pathologists, which I think are very understated in medicine.
- Incredible opportunity.
- I enjoyed seeing all the lab equipment.
- I learnt how there are many different types of pathologists.
- The talks about uni, interviews and personal statements were invaluable.
- I loved the fact there was hands on learning and exploring a part of medicine I wasn't aware of before.
- I didn't have any understanding of what went on in labs but now I have an idea of what they do and how vital it is to keep medicine progressing within the NHS.
- I didn't really understand the extent of work that pathologists do before this, but now I understand how important it is, not only for patients who have died but for the care of current patients.
- Pathology is incredibly underrated and keeps all aspects of the healthcare system afloat.
- Pathology is very interesting and important in medicine and it is more intriguing than you may think.

Figure 1. Example student feedback quotes.

Figure 3. Student feedback word cloud.
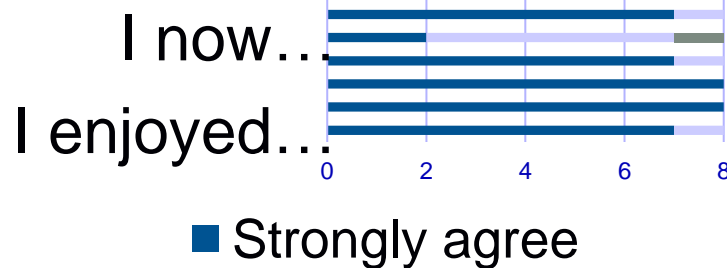
Figure 2. Example post pathology programme survey results from the eight student participants.

Discussion

- Our programme emphasises the importance of pathology careers.

- To reap the benefits of a diverse and inclusive medical community reflecting our society, we must recognise that talent and potential have no socio-economic boundaries.

- We hope to continue inspiring new pathologists from diverse backgrounds and instilling confidence to aim higher.

Talent and potential have no socio-economic boundaries.

Acknowledgments

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BARRIERS TO PROVIDING A SAFE AND INCLUSIVE PATHOLGOY SERVICE FOR TRANSGENDER PATIENTS

Samantha Bonney, Lead Transfusion Practitioner
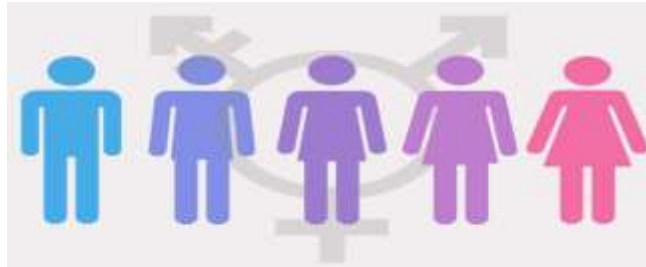
BACKGROUND

Approximately 1 in 200 people in the UK have a gender identity that is different to their sex assigned at birth (1). Forty percent of transgender individuals have reported a negative experience, when accessing healthcare, because of their gender identity (2).

The Transfusion Department at Mersey and West Lancashire Teaching Hospitals NHS Trust (MWL) are seeing more requests from transgender patients and this has prompted us to examine our policies and process. Three recent patients include:

PATIENT ONE
Thirty-year-old pregnant trans male presenting to antenatal clinic for booking serology bloods.

PATIENT TWO
Twenty-five-year-old trans male attending the Emergency Department with GI bleeding, requiring urgent blood transfusion.

PATIENT THREE
Forty-four-year-old trans male having pre-op blood tests found to have red cells antibodies (anti-E).

All three requests were labelled as 'male' with no indication of transgender status.

LEGAL CONSIDERATIONS

The gender recognition act 2004 (3) stipulates that disclosing a patient's transgender status, without their consent, even for medical purposes is unlawful. Furthermore, The Equality Act 2010 (4) makes it a criminal offence to discriminate against because of gender reassignment.

The British Medical Association (5) instructs that a person's gender history should not be divulged to anyone without their consent and that information that may reveal gender history, and which is not of relevance to the current medical situation, is not disclosed in any communications or referrals.

ETHICAL CONSIDERATIONS

Caldicott principle 7 states 'the duty to share information for individual care is as important as the duty to protect confidentiality'. (6)

NATIONAL GUIDANCE

National guidance on how to provide care that is inclusive and safe for transgender and non-binary patients is lacking.

ISSUES FOR PATHOLOGY

Pathology policies and processes were examined MWL.

Sex and gender are used synonymously in different electronic healthcare systems. These systems are often interfaced, with one system populating the wrong field in another. Moreover, many Trust IT systems only offer binary options for gender.

Policies, particularly in pathology departments, are not always transgender inclusive and often don't allow for relevant information to be captured, thus compromising patient safety. For example, childbearing potential is clinically relevant for anyone receiving a blood transfusion. Similarly, interrogating previous records for red cells antibodies and special blood requirements is also a crucial part of transfusion pre-compatibility testing, but often missed when a patient has transitioned and been issued a new NHS record.

Not knowing or incorrectly identifying a patient's sex assigned at birth (SAAB) can also lead to problems interpreting pathology tests, especially when reference ranges are based on a cis-gender population.

Lastly, there is no formal consent process in use for recoding consent to sharing transgender status for medical purposes or for storing this information on electronic systems. The Trust is waiting for national guidance but in the interim, is not always providing inclusive

IMPACT ON PATIENT CARE

PATIENT ONE
Consent was not requested to view previous health records. The patient had three earlier pregnancies, under a previous NHS number. This health record could not be interrogated for red cell antibodies or special requirements.

The Laboratory Information System (LIMS) only records SAAB, whereas the wristband and electronic pathology requesting system (CareFlow), only records gender identity (GI). Sex assigned at birth in the LIMS must be set to 'female' for appropriate blood to be issued to patients with childbearing potential.

The blood compatibility label, produced by the LIMS, contained SAAB but the wristband contained GI. This flagged a patient mismatch and would not allow blood to be transfused using the electronic blood tracking system (BloodTrack®). This resulted in a delay to patient care.

PATIENT TWO
Emergency uncross-matched group O Positive blood was transfused to the patient. The Transfusion Practitioner Team only became aware of the trans status at the 'Major Haemorrhage' debrief a few days later. The patient had retained female reproductive organs and did wish to become pregnant in the future. The patient was Rh D Negative so could produce a Rh D antibody that has the potential to cause severe haemolytic disease in any future pregnancies.

PATIENT THREE
Upon asking about the origin of the red cell antibodies, the patient's clinician disclosed to the laboratory that the patient was transgender and had had two pregnancy. The previous record was disclosed and a further red cell antibody, in addition to the anti-E (anti-Fya) was also discovered on the old record. The new LIMS record was updated by lab staff to say, 'transgender patient, please see additional record'. There is no evidence that the patient consented to this.

RECOMMENDATIONS

Clinical IT providers must work with pathology leads to develop systems that support inclusive care for transgender patients. Equality, diversity, and inclusion (EDI) departments must be made fully aware of the issues by encouraging staff to report any incidents and near misses. Clinical staff must also be educated on the importance of sharing transgender status, when consent is given, to prevent patient harm.

Ultimately, national guidance is required so that all Trusts can be advised on the best way to provide safe, inclusive and respectful

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3. Gender Recognition Act 2004 (legislation.gov.uk)

Bringing Trainees and Trainers Together

Susan Troup, Lauren Carroll

Clinical Biochemistry, South of Tyne and Wear Pathology Centre, Queen Elizabeth Hospital, Gateshead

Why?

There has been an absence of Clinical Scientist trainees in the North-East for many years. Our first STP trainee was welcomed to Gateshead NHS Foundation Trust in 2020, followed by a second in 2022. There are now several other trainees at STP and HSST level across the region, but opportunities to meet in-person have been sparse due to Covid. In recognition of this we decided to organise a regional training and networking event.

Where & When?

The regional training event was hosted at the Queen Elizabeth Hospital, Gateshead Health NHS Foundation Trust, in November 2022. This was carefully timed to allow trainees to attend around university and NSHCS commitments, and the FRCPath examinations.

Who?

The event was open to trainees on the STP and HSST programmes, as well as other trainees preparing for FRCPath exams. Training officers and others with an interest in training were also invited. We included biochemistry, haematology, microbiology, immunology and histocompatibility and immunogenetics.

What?

We ran a mix of sessions, some aimed at STP and some geared towards HSST and those preparing for FRCPath. We made sure to include time for general discussion, building networks and creating links to facilitate some of the more specialist training requirements. A social evening of bowling and dinner allowed even more networking time. Topics included:

- STP planning (including training plans, rotations and portfolio evidence)
- STP projects and electives
- STP IACC and interview
- HSST planning (including training plans and portfolio evidence)
- HSST/FRCPath projects
- HSST leadership and management diploma
- FRCPath style OSPE scenarios
- Service consolidation
- Management scenarios

How did it go?

The event was well attended, with 27 people joining from across the Northern, Yorkshire and North Cumbria regions. Feedback was overwhelmingly positive, and attendees valued the opportunity to meet in person to discuss some of the more challenging elements of training.
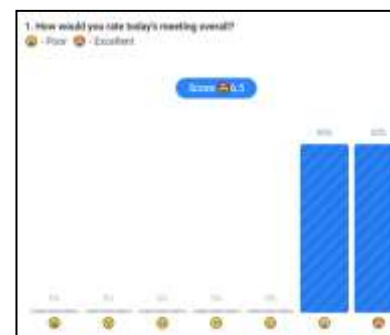
"Good chance to meet other trainees, reassuring to hear that problems/issues are not unique"

"Really amazing, well organised and fab to see people face to face"
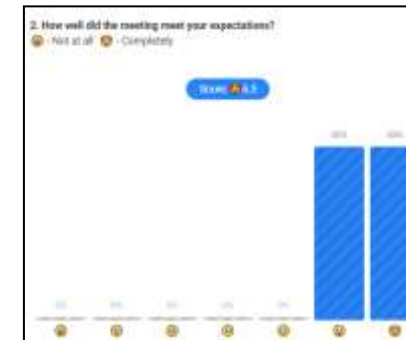
"Useful conversations about competencies"

"Very useful and great to share ideas and resources"

"Great for networking!"

What Next?

There is a clear appetite in the region to arrange future events. These should rotate around different areas within the region to ensure equitable access. Following discussion at the event steps have been taken to reinvigorate a regional network for STP trainees. Biochemistry training officers have expressed an interest in working more closely together and an initial meeting led by the Yorkshire region proved very successful. As a region we need to maintain the momentum gained here to make the North-East a successful and robust centre for training.

Tumour cellularity assessment in tissue samples for molecular pathology
Dr H. Alzein, Dr T. Mandalia, Dr B. Garside

Introduction

Molecular pathology has been key in enabling clinicians to target cancer treatment towards an individual's disease, and accurate testing is reliant on adequate tissue sampling. Tumour cellularity (TC) percentage is a vital factor in assessing the suitability of samples for molecular testing; the heterogenous nature of solid tumours gives rise to an increased risk of false negative results when there is limited sampling of tumour cells. [1] Minimum tumour cellularity required for direct sequencing is around 20-25%, however estimation can be inaccurate and variable amongst reporting histopathologists. [2]

Aims

- To compare the analysis and reporting of 21 samples, **focusing on the variation between reported tumour cellularity** and the **method of reporting** amongst consultant histopathologists at Royal Devon and Exeter Hospital
- Ultimately, to improve the selection process of samples considered for molecular testing, increasing the number of high-quality samples and **reducing false negative results**

Methods

- 18 tissue specimens were randomly selected from 3 successive colorectal MDTs
- 3 cytology specimens were selected from FNAs of lymph nodes and pleural taps recently used in biomedical scientist teaching
- These were analysed for tumour cellularity percentage, total cellularity and presence of necrosis by 7 consultant histopathologists at RDUH
- The method of reporting was left open to interpretation by the individual pathologist
- A short questionnaire was used to identify the usual reporting practice of the pathologists
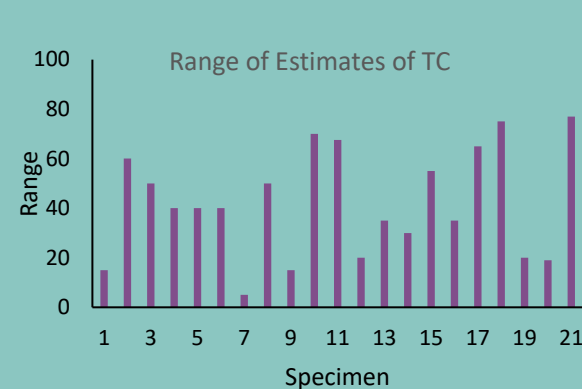
Accepted standards

- The estimation of TC should be determined in the area with the **highest density** of viable neoplastic cells - avoiding inflammation/necrosis/desmoplastic stroma.
- The estimation of TC should be performed **grossly as the percentage of neoplastic cells versus all cells in a zone for dissection.**
- The **percentage of nuclei should be estimated**, not the area the respective cells are covering. [3]

Results

Usual reporting practices

PREFERRED REPORTING METHOD FOR TC
- Exact percentage ■ >20% or <20% ■ Range ■ Other
43% / 29% / 14% / 14%

DO YOU REPORT THE PRESENCE/ABSENCE OF NECROSIS AND HAEMORRHAGE?
- Yes ■ No
57% / 43%

Variation in reported tumour cellularity %

Range of Estimates of TC (x-axis: Specimen 1–21, y-axis: Range 0–100)

Reporting of these samples

- 4/7 (57%) consultants reported TC with an estimation of exact percentage
- 3/7 (43%) used ranges
- No consultant reported the samples using a threshold or a combination of methods, despite this being reported as a preferred option

- Every specimen showed variation amongst TC estimate, with the **greatest range being 75%**
- The mean range of estimated TC was **42%**
- In 9/21 (43%) samples there was a disagreement regarding the presence of necrosis
- 2/7 consultants added they would comment on inadequate samples or samples that would be suitable for further macrodissection

Discussion

An accurate assessment is important to select adequate tissue samples for molecular testing, thereby reducing the number of false negative results that may impact patient treatment.

Possible barriers:
- The nature of estimation means that variation is to be expected
- Differences in interpretation of definitions – uncertainty surrounding *total cellular content* led to high levels of variation in reporting of this factor
- Differences in how are estimates being made
- No agreed standard method of reporting

Recommendations

We recommend the introduction of a **Standard Operating Procedure** where the definitions, estimation methods and reporting methods are standardised. The main points should include:

1. Every biopsy should include the reported tumour cellularity percentage
   - Defined as the **number** of neoplastic cells/nuclei compared to the overall number of cells
2. Writing < or > a certain percentage should not be accepted practice
3. When tumour cellularity is low, then the pathologist should state whether macrodissection is possible
4. If necrosis is present, this should be mentioned on the report
- Circulation of educational material amongst the department
- Consideration of other factors to improve the quality of samples sent for molecular testing, e.g.
   - Handling of tissue samples
   - Time to fixation / duration of fixation
   - Tissue artefacts

References

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2. Smits, A.J. *et al.* (2014) 'The estimation of tumor cell percentage for molecular testing by pathologists is not accurate', *Modern Pathology*, 27(2), pp. 168–174. doi:10.1038/modpathol.2013.134.
3. Dufraing, K. *et al.* (2019) 'Neoplastic cell percentage estimation in tissue samples for molecular oncology: Recommendations from a modified Delphi Study', *Histopathology*, 75(3), pp. 312–319. doi:10.1111/his.13891.

Carefertility

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Development, practical application and outcomes of an artificial intelligence model to automatically assess and annotate human embryos during IVF treatment

Aim

This project aimed to develop a machine learning (ML) model using modern neural network architecture to produce comparable annotation data to manual methods for use with algorithmic live birth prediction for embryo selection, and to evaluate its performance.

Background

Artificial intelligence across healthcare industries is increasing.

Time-lapse in IVF laboratories has amassed numeric data, resulting predominantly from annotated manual assessment of images over time. Embryo annotation practice is variable in quality, can be subjective and is time-consuming.

Blastocyst stage human preimplantation embryo at 125 hours post insemination

Methods

Multicentre quality assured annotation data from 63,383 time-lapse monitored embryos (EmbryoScope®), comprising over 400 million individual images, were used to train and validate a ML model to generate morphokinetic annotations. Data was derived between 2012-2021. Pre-clinical accuracy was assessed using 900 transferred embryos not used for ML development (with live birth outcome) by comparing the output of an established, prospectively validated embryo selection model when the input was either ML-automated, or manual annotations. Performance was assessed following implementation for selection of over 349 transferred embryos whilst using MA and ML-automated annotations in parallel for their fetal heart (FH) outcome.

Machine learning was used to develop rapid, complete, accurate and automatic annotation of time lapse images of embryo development

Results

Efficacy of the ML model to automate utilisable annotations was demonstrated by comparison with manual annotation data using an established, validated embryo selection model which, predicts live birth. Predictive capability was measured against manual annotation, using receiver operating characteristic curves to provide area under the curve (AUC).

The in-house developed auto-annotation ML model performance was assessed on the development set (n4994), independently tested (n900) transferred embryos with LB outcome and prospectively reviewed (n349) on transferred embryos with FH outcome for prediction against the manual annotation model. The respective AUCs for the ML-automated annotation and the manual annotation models were 0.677 vs 0.675, 0.7 vs 0.661 and 0.71 vs 0.71. See table 1. The consistent AUC's for ML auto annotation model across three differing data sets, suggests model competency and lack of evidence for overfitting.

Total time saving = 4 working days for every 1000 embryos
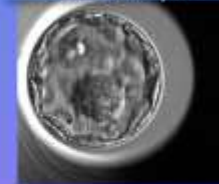
With this ML model, variables are produced for all embryo development (annotation) points

Values with lower confidence can be checked manually and revised

In this ML/Python version we see improvements in live birth prediction observed

Table 1	Transferred embryos (n)	AUC ML-AA	AUC MA
Development set	4994	0.677	0.675
Independent set	900	0.7	0.661
Prospective set	349	0.71	0.71
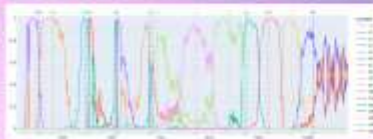
Example temporal convolutional network cleaned following application of soft localisation loss function

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THE PATHOLOGY PORTAL
&
FRCPATH HISTOPATHOLOGY PART 2 EXEMPLARS

Emmy Abu-Trainee editor of the pathology portal

INTRODUCTION

- Developed by RCPath, HEE and other professional bodies
- Launched in August 2022
- The 'Mock exam practice cases' section of the portal showcases exemplars of FRCPath part 2 histopathology short surgical cases to aid candidates in their preparation for the exam

AIMS

Pathology portal
- Create an interactive learning resource platform to support learning across all pathology disciplines
- Case based learning
- Easy assess to learning materials
- Support demonstration of competence at specific levels of ability and support for less strong areas
- Provide digital assessments, workshops and courses
- Support reskilling following a move of role, errors or return to practice

Mock exam practice cases
- Provide exemplar questions for the histopathology part 2 and model answers
- Guide preparation for the part 2 exam in histopathology

WHAT YOU SEE
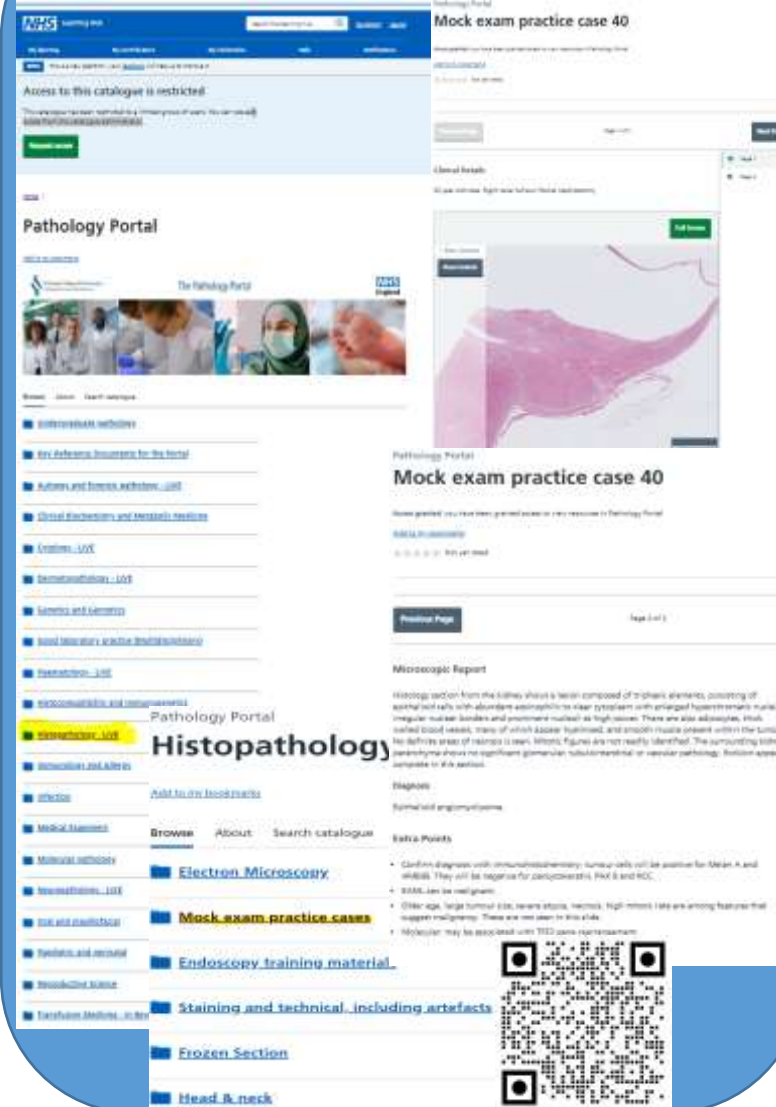
CONTENT FORMATS

FEATURES

Pathology portal
- Over **4600** modules live, all quality assured by expert editors and international faculty
- Constant content and feature addition
- **80000** launches and completions since August 2022 launch
- Over **2000** users nationally and internationally
- Simple way to upload cases to encourage contributions

Mock exam practice cases
- 40 short cases and answers and counting
- Watch out for videos with tips for the exam and long cases

Thanks to Prof Jo Martins, Dr Esther Youd and the Pathology portal team

pathologyportal @rcpath.org
learninghub.nhs.uk/catalogue/pathologyportal

Regional Delivery of the Scientist Training Programme in Genomics

Emma Clark & Kate Rankeillor, North East & Yorkshire Genomic Laboratory Hub

NHS
North East and Yorkshire
Genomic Laboratory Hub

NEY GLH encompasses 5 laboratories across 3 cities (Leeds, Sheffield, Newcastle), covers an area of over 10,000 square miles and a population of over 8.5 million. Patients are at the heart of what we do, we are embedding genomics into everyday healthcare through education, training, and collaborative research. A key element of this is the education and training of our staff, including addressing future workforce needs.

Background

- Within NEY GLH trainees are enrolled on the Scientist Training Programme (STP) in Genomics, Cancer Genomics and Bioinformatics specialisms
- The 1st year of the STP involves introductory rotations into specific areas of healthcare science dependent on the specialism, 3 of which are delivered by NEY GLH
- In line with future workforce planning, there was a high intake for the 2022 cohort, with 18 internal NEY GLH trainees and 13 external trainees from other Life Science disciplines requiring at least one rotation within NEY GLH
- Radical change was required to deliver increased demand in a virtualised framework

Approach

- A revised curriculum was implemented in 2022, requiring changes to training delivery - we approached this as an opportunity to work as a GLH to deliver the rotations
- Due to our large geography and uplift in trainee numbers we proposed a primarily virtual delivery model for the 3 rotations delivered by NEY GLH
- One rotation was delivered as a hybrid module, featuring some on site observation
- Plans were co-ordinated centrally, and training delivery was split across our GLH sites
- Groups were kept to 10 trainees or less to ensure sufficient support and interaction

Benefits:
- Standardised, high-quality training
- Shared best practice
- Increased efficiency and clinical output
- Reduced duplication
- Improved networking
- Aligned with national initiatives

- By co-ordinated regional engagement and collaboration, increased use of virtual technology, and consolidation and curation of shared resources, NEY GLH has successfully delivered 1st year STP rotations on a regional basis across the GLH for 2 years running
- This innovative, interactive approach has enabled all trainee scientists to access the same high-quality training regardless of GLH site, with theory delivered remotely in groups enhanced by local practical training
- This increases efficiency of training and supports our capacity to train more staff, within Genomics and other healthcare science specialisms
- The efficiencies gained in training time and increased training capacity will ultimately support delivery of clinical output, enabling us to deliver an effective and efficient Genomic Medicine Service

Feedback

- A survey was circulated after each delivery, containing 7 questions with Likert scale responses and an opportunity for open comments
- The responses were analysed to identify key areas for improvement
- Regular meetings with trainers and trainees were held to discuss feedback, to identify solutions and to plan changes to improve future delivery
- Our approach allowed for immediate improvements to be made where key concerns were highlighted - resulting in improved feedback

Rotations 2022/23 Summary

Next Steps

- Further improvements were implemented for the 2023 intake, including increased on-site time, to improve the trainee experience
- The survey has been refreshed to capture additional detail and clarity on areas requiring further improvement
- We are continuing our approach of central GLH delivery for the Core and Specialist STP modules

The Newcastle upon Tyne Hospitals NHS Foundation Trust
The Leeds Teaching Hospitals NHS Trust
Sheffield Children's NHS Foundation Trust
Sheffield Teaching Hospitals NHS Foundation Trust

Pathology Portal

The Royal College of Pathologists, together with Health Education England (HEE) and colleagues in other professional bodies have developed an innovative adaptive learning platform to support trainees, practising pathologists, scientists and those in pathology-linked roles – the Pathology Portal.

Using technology to enhance learning, the Portal incorporates the ability to digitally host and view whole slide images and a wide range of other resources, including teaching sessions and quizzes. Published content includes over 4,000 modules with more to follow, in a phased rollout across pathology specialties.

The Pathology Portal is part of HEE's newest digital platform and is offered as part of its Learning Hub sitting alongside other educational resources.

The Pathology Portal, launched on 15 August 2022, has been designed to support not only digitally morphological learning, but also to support clinical and macroscopic learning. It includes upload of material already scanned as part of previous Deanery projects, to reduce duplication and provide broader access.

The Pathology Portal currently features a huge amount of modules including cases, videos and audio teaching, quizzes, documents, weblinks and more. These initial sets of modules cover:

- autopsy pathology
- cytology
- dermatopathology
- histopathology
- neuropathology.

This includes subspecialist training material that is not widely available.

For an introductory demonstration of the Pathology Portal, a webinar can be found here.

The development of the Pathology Portal is ongoing and is governed by several cross organisational project groups such as the Project Board, the Editorial Board and the External Advisory Board.

We are keen for additional pathology specialty content contributions. Please contact the Pathology Portal team at pathologyportal@rcpath.org if you would like to contribute, if you have suggestions for content or would like more information.

For those in the UK, to access the Pathology Portal you will need to create a Learning Hub account if you do not already have one.

#PathologyNorth23

NOTES